This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

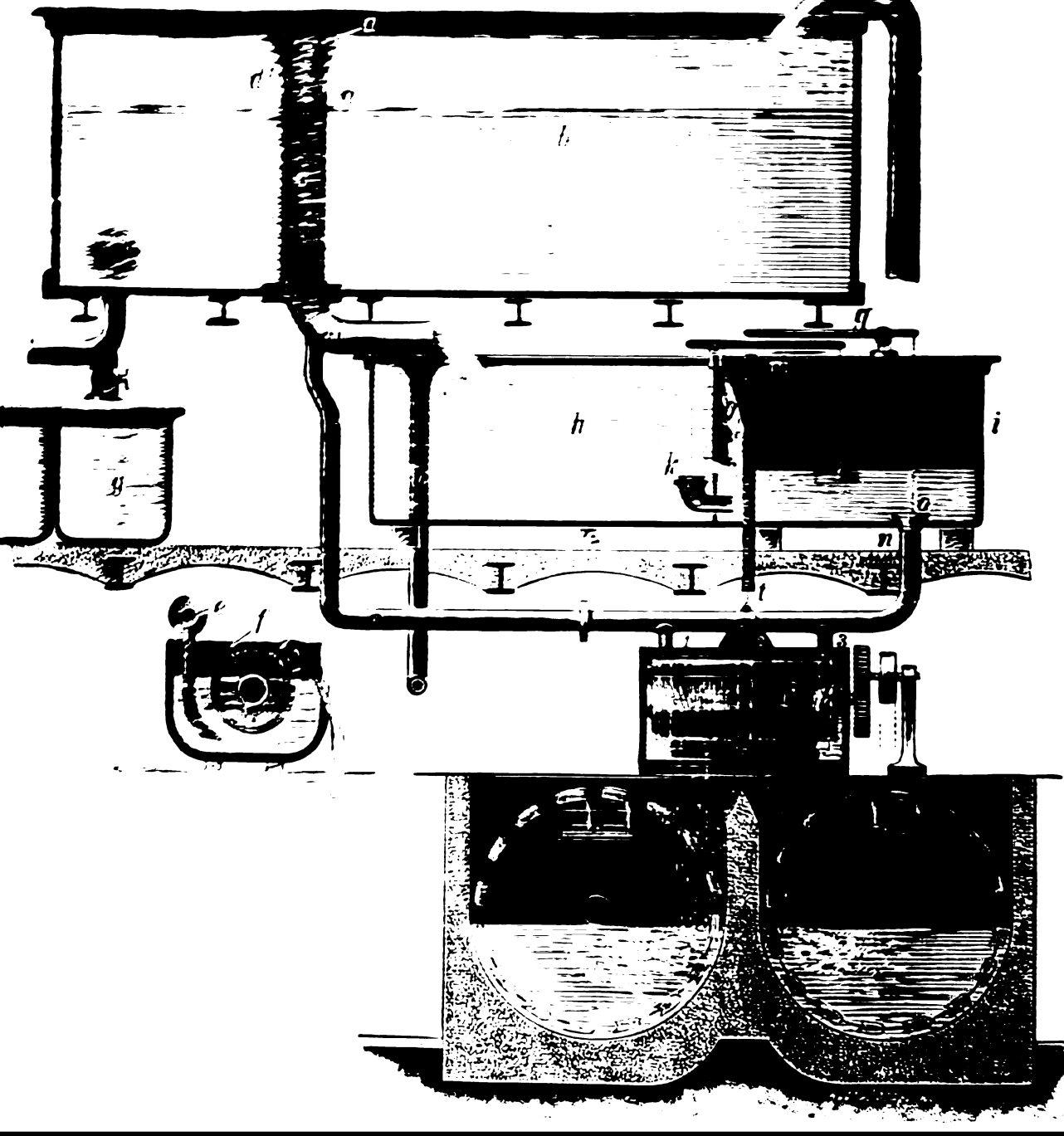
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`



The World's paper trade review

Digitized by Google

Digitized by Google

VMPA
Washington
Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

Machine Wires, &c., &c.
ALBANY ROAD LONDON SE
Paper Moulds.
POSSESSORS OF THE ONLY GRAND PRIX AND GOLD MEDALS AWARDED TO THE TRADE.

The World's Paper Trade Review
A WEEKLY JOURNAL FOR PAPER MAKERS & ENGINEERS.

[REGISTERED AT THE GENERAL POST OFFICE AS A NEWSPAER FOR TRANSMISSION IN THE UNITED KINGDOM.]

TWENTY-FIFTH YEAR.

VOLUME XLII. NUMBER 14. LONDON: APRIL 1, 1904. PRICE SIXPENCE. EVERY FRIDAY.

Andrews & Co., Ltd.,
91, QUEEN VICTORIA STREET, LONDON,
And at MANCHESTER.
Telegrams:—"ARBORARIUS," London. Telephone:—835, Bank.

WOOD PULP AGENTS.

MAGO Finest Grade Moist Mechanicals, Hot and Cold Ground.
TOFTE Easy Bleaching Sulphite. (Except in Scotland).
TILSIT Extra Strong German Mitscherlich Sulphite
BÖHNSDALEN Sulphites, Strong News and Easy-Bleaching.
HAFSLUND SULFITFABRIK, Easy-Bleaching Sulphite.
WERMBOHLS FABRIKS AKTIEBOLAG, Easy-Bleaching and Strong Soda Pulps. (Except in Scotland).
GLOMMENS TRAESLIBERI, Hot-Ground and Extra Strong Moist Mechanical Pulp.
SIDEROSTHEN Anti-Corrosive Paint.

Digitized by Google

THE NEW YORK
PUBLIC LIBRARY
197894B
ASTOR, LENOX AND
TILDEN FOUNDATIONS
1902

JOHN O'THOM

CONTRACTOR TO H.M. GOVERNMENT

Canal Works, PATRICROFT

ENGLAND.

BORE HOLES

FOR

Minerals, Artesian, Brine,

AND

Oil Wells.

CONTRACTOR.

Manufacturer of All Systems of

EARTH BORING PLANTS,
STEAM ENGINES & WINCHES,

BORE HOLE & DEEP WELL PUMPS,
BOILER FEED DONKEY PUMPS &c.

Digitized by Google

aste
apers
.UX
PIERS
CIALITY
PORT
'ERS OF
Metals
Leather
Rubber
—o—
IAN BROS
and Wharf,
house,
NDON.
se, 112 E
Chiffons, London.

The World's Paper Trade Review
A WEEKLY JOURNAL FOR PAPER MAKERS & ENGINEERS.

[REGISTERED AT THE GENERAL POST OFFICE AS A NEWSPAPER FOR TRANSMISSION IN THE UNITED KINGDOM.]

TWENTY-FIFTH YEAR.

VOLUME XLII. NUMBER 14. LONDON: APRIL 1, 1904. PRICE SIXPENCE, EVERY FRIDAY.

The Circulation of Stuff Water AND RECOVERY OF PULP.

Mr. Robert Dietrich's System.

Many valuable inventions bearing on the economical working of pulp and paper works are associated with the name of Mr. Robert Dietrich, of the firm of Messrs. Dietrich Bros., of Merseburg, and one of the latest—the subject of a British patent—relates to "improvements in regulating the supply of pulp water to pulp catchers or savers and the like used in the manufacture of paper." As manufacturers of both pulp and paper, Messrs. Dietrich Bros. have the facility of demonstrating in their own works the practical advantage of any invention introduced by them, and in regard to their stuff water circulating apparatus, it is claimed that not only is efficiency secured, but that a great saving in labour is effected. Already several of Mr. Robert Dietrich's inventions have been adopted in British mills, and therefore the following descriptive particulars concerning his stuff water circulating system, reprinted from *Der Papier-Fabrikant*, may interest many of our readers:—

It is well known that in paper mills the beaters which have recently been made of particularly large sizes, are charged with stuff water from the circulating basin. Hence the level in the circulating basin depends partly on the amount transferred to the beaters, and on the other hand on the admission of water to this basin. The feeding of the used over again waste waters from the sieves, into the circulating basin, is as a rule not subject to variations; hence only the irregular drawing off of the contents will determine the height of the water level in the circulating basin.

The water level in the circulating basin is usually controlled by a stuff overflow pipe with trumpet shaped or funnel shaped mouth and through which the stuff water flows into the stuff catcher. As long as one or more beaters are being filled, the water level sinks in the circulating basin and the supply to the stuff catchers is interrupted. Only after the liquid in the circulating basin has gradually reassumed its highest level after the filling of the beaters is terminated and upon its beginning to rise above the same, the water flows through the funnel of the stuff overflow pipe, arranged in the circulating basin, to be admitted to the beaters. Upon the filling of a beater, the water level in the circulating basin will descend in accordance with the amount taken out, and it will then gradually rise when the beater is emptied, until the stuff water flows again through the funnel into the overflow and thence into the stuff catcher. The overflow of water and hence also the admission of the same to the stuff catchers takes place periodically, that is to say, every time the water level in the basin goes beyond the highest point of the funnel of the stuff water overflow pipe. However, in this case, the stuff catchers get very frequently more water than they are able to work up advantageously, and in other instances, whe

Digitized by Google

[illegible] water flows through the lower [illegible] holes, and in case of higher [illegible] flows through the higher situated, [illegible] holes [illegible]. This does away with the only periodical overflow, the [illegible] taking place now not only at a [illegible] water column (highest point of the [illegible] shaped end in the circu- [illegible] during the whole time

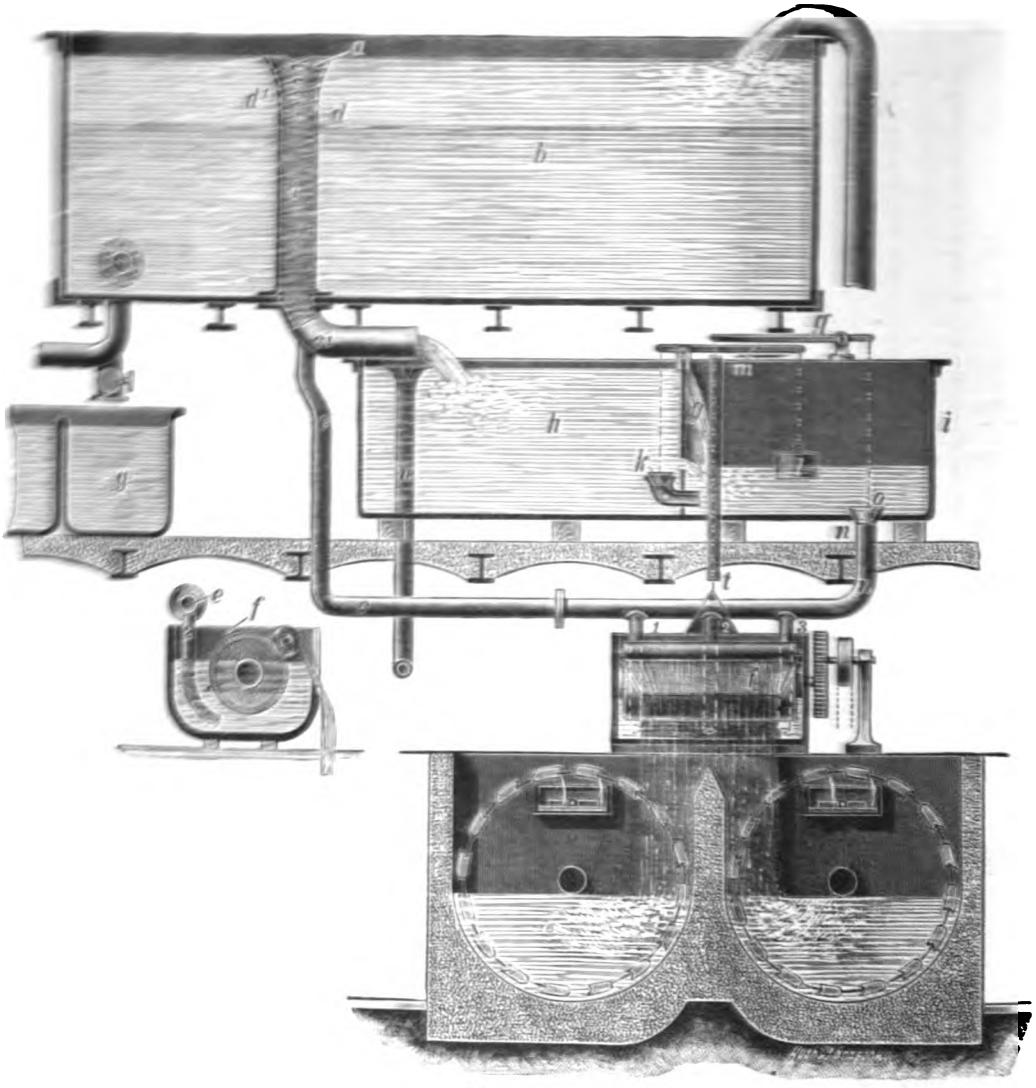


FIG. 1.

(Fig. 1) of the stuff water overflow pipe *c*, arranged in the circulating basin *b* is provided with holes *d* increasing in size from bottom to top. While heretofore the overflowing of the water contained in the circulating basin was only possible in case the liquid in the circulating basin had passed its highest level, this can take place earlier already with this arrangement. At a lower of the rising of the water in the basin, beginning with the lowest level. By so arranging the funnel shaped pipe the effect is produced, that the stuff catchers *f* are fed continuously and not periodically through the pipe *e* connected to the funnel shaped piping *c*, three branches *1*, *2*, *3* of the pipe *e* opening out below the cylindrical sieve of the stuff catchers.

Digitized by Google

The following device is used for rendering uniform the thus produced continuous feed of the stuff catchers:—

Between the circulating basin *b* and the stuff catchers *f*, two tanks *h* and *i* which are separated by a partition, are arranged, and which are connected by a pipe, provided with a valve *k*. The valve *k* is actuated the conduit *n*, remains the same during the operation of the stuff catchers. The overflow from the circulating basin *b* takes place in the tanks *h*; in order to pass into the stuff catcher, the overflow has to pass through the chest *i*. Hence the overflow from the circulating basin may also not be uniform; it will only have an influence upon

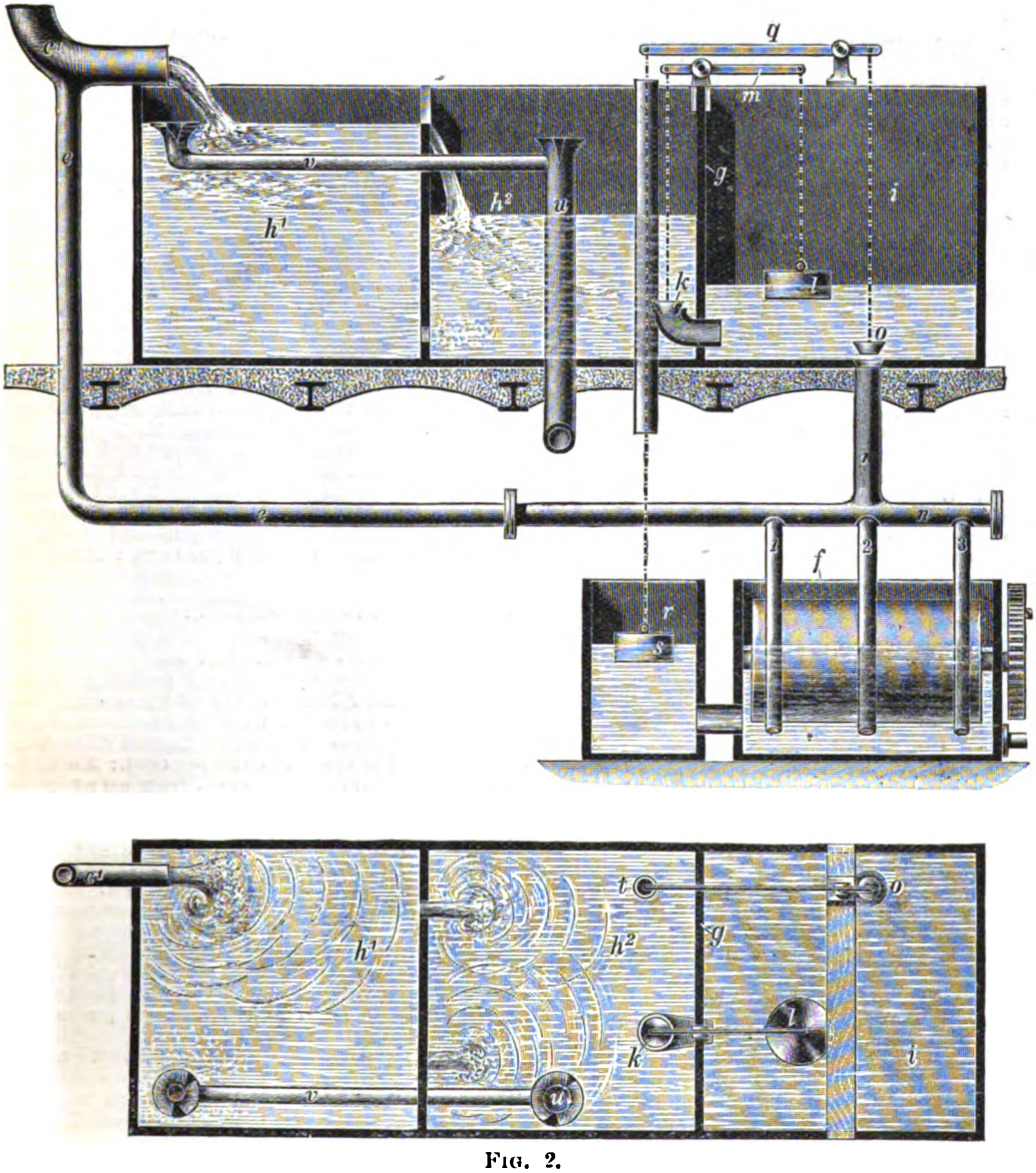


Fig. 2.

automatically by a float *l* arranged within the tank *i* and by means of a two-armed lever *m*, to which both the float *l* and the valve *k* are attached by chains. The feeding of the stuff catchers will evidently be uniform, when the water level in the tank *i* from which the stuff catchers are now fed by the water level in the tank *h*, while the water level in the tank *i* can be maintained at the same height. If the water level sinks in the tank, *i*, the valve *k* is opened by the float *l* and the overflow from the tank *h* into the tank *i* takes place, until the column of liquid necessary in the tank *i* has been

Digitized by Google

restored, at which time the valve is also simultaneously closed. Thus, for the uniform feeding of the stuff catchers a certain column of water in the chest or tank *i* is required, as already mentioned, the said water column being determined from the start upon the fixing up of the device, and being governed by the sizes of the stuff catchers that may be provided.

The column of water required in the tank *i* may also be obtained by an outlet opening provided in the partition wall *g* at the level of the valve, and it may at the same time be also obtained by providing means for an overflow at the highest point of the partition itself (overflow over the edge of the wall). Tap holes which allow of the water flowing over gradually from the tank *h* into the tank *i*, and with comparatively smaller area of flow than that of the feed from the circulating basin, might be used in less complicated arrangements without float and without valves. These overflows over the edge of the partition, as well as through a hole in the partition wall that may be closed by a bung or the like, might be of importance, in the case of unforeseen accidents occurring in the regular run of the whole plant, and which might have the effect of causing an excess of water to flow into the tank *h*. In such cases the water level in the tank *i* would certainly be influenced which will have an unfavourable action upon the necessary uniform feeding of the stuff catchers. With a view of avoiding this, the admission to the stuff catchers from the tank *i* takes place through a floating valve *o*. The valve *o* is operated by a float *s* provided in the tank *r* (Fig. 2) and by means of the two armed lever *g*.

The feeding of the stuff water to the stuff catcher *f* in the circulating basin takes place therefore at the overflow through the holes *d* of the funnel-shaped pipe *a* by means of the connecting pipe *e* of smaller diameter than the funnel pipe *c*, and which is so proportioned that the pipe *e* feeds only so much of the stuff water, as the stuff catcher is able to work up. The excess of stuff water which flows off through the funnel pipe, flows through the pipe c^1 into the first collecting or distributing tank *h*. If for any reason whatever the overflow through the funnel pipe in the circulating basin and the feeding of stuff water through the pipe *e* ceases, the stuff catcher *f* is charged with stuff from the collecting and distributing tanks *h* and *i*, and by means of the float *s*, the valve *o* and the pipe *n*.

The pipes *1*, *2*, *3*, serve for the uniform distribution of stuff water in the stuff catcher *f*. They open out at a small distance from the bottom of the stuff catcher and below the catching drum, so that the stuff water is admitted from below. In this manner the catching of the floating fibres by the stuff catching drum is generally aided on account of the rising of the floating fibres. In order to be able to let the water coming from the stuff water overflow pipe flow as quietly as possible into the tank *i*, the tank *h* into which the water coming from the stuff water overflow pipe enters first, may be replaced by two or several tanks (as shown for instance in Fig. 2 by two tanks, h^1 and h^2).

The pipe *u* which is provided with a trumpet-shaped or funnel-shaped end (Fig. 1) serves for the discharge of the sludge accumulating in the tank *h*. The same purpose is accomplished by the pipes *u* and *v* which are connected with each other (Fig. 2). They serve at the same time as overflow pipes for assisting the action of the pipe *c*.

Egyptian Demand for Paper.

Imports at Alexandria.

In the *World's Paper Trade Review*, February 26th, some particulars were published showing the imports of paper, books and printed paper into Egypt from 1887 to 1902, and the values given of the supplies received from the United Kingdom and other countries. In the year 1902 the total value was shown to be £E.244,354, and it appears, from a report recently supplied by Mr. Vice-Consul Freeman, that of this amount the receipts of "paper and books" at Alexandria were of the value of £241,977. The increase since 1898 has been continuous, amounting to 68 per cent. The United Kingdom advanced to 15 per cent. from a four years' average of 9 per cent.; Austria-Hungary fell to 40 per cent. from an average of 42 per cent.; Italy, 20 per cent.; France fell from 14 to 12 per cent.; Germany, 8 per cent.; Turkey fell from 3 to 2 per cent.; Belgium fell from 4 to 1 per cent.

The value of writing and printing paper received at Alexandria in 1902 amounted to £69,061. Compared with 1898 an increase is shown of 58 per cent. The United Kingdom rose steadily from 11 to 24 per cent.; Austria-Hungary fell to 45 per cent. from an average of 49 per cent.; Italy fell from 15 to 13 per cent.; France from 11 to 8 per cent.; Germany from 10 to 8 per cent.; Belgium from 7 to 2 per cent.

In packing paper, cardboard, etc. (of the value of £89,672 in 1902), a continuous increase has taken place since 1898, amounting to 95 per cent. The share of the United Kingdom rose steadily from 2 to 6 per cent.; Austria-Hungary, 47 per cent.; Italy, 32 per cent.; Germany, 9 per cent.; France, 5 per cent.; Belgium fell from 4 to 1 per cent.

Books and other printed matter, and paper articles were received at Alexandria in 1902 to the value of £38,866—a continuous increase since 1898, amounting to 72 per cent. United Kingdom, 31 per cent., after a four years' average of 27 per cent.; France, 26 per cent.; Germany, 13 per cent.; Italy, 13 per cent.; Austria-Hungary, 8 per cent., after an average of 13 per cent.; Turkey, 5 per cent.

THE WALL PAPER MANUFACTURERS, LTD., have given out a contract for the erection of new works at Harehills, Leeds.

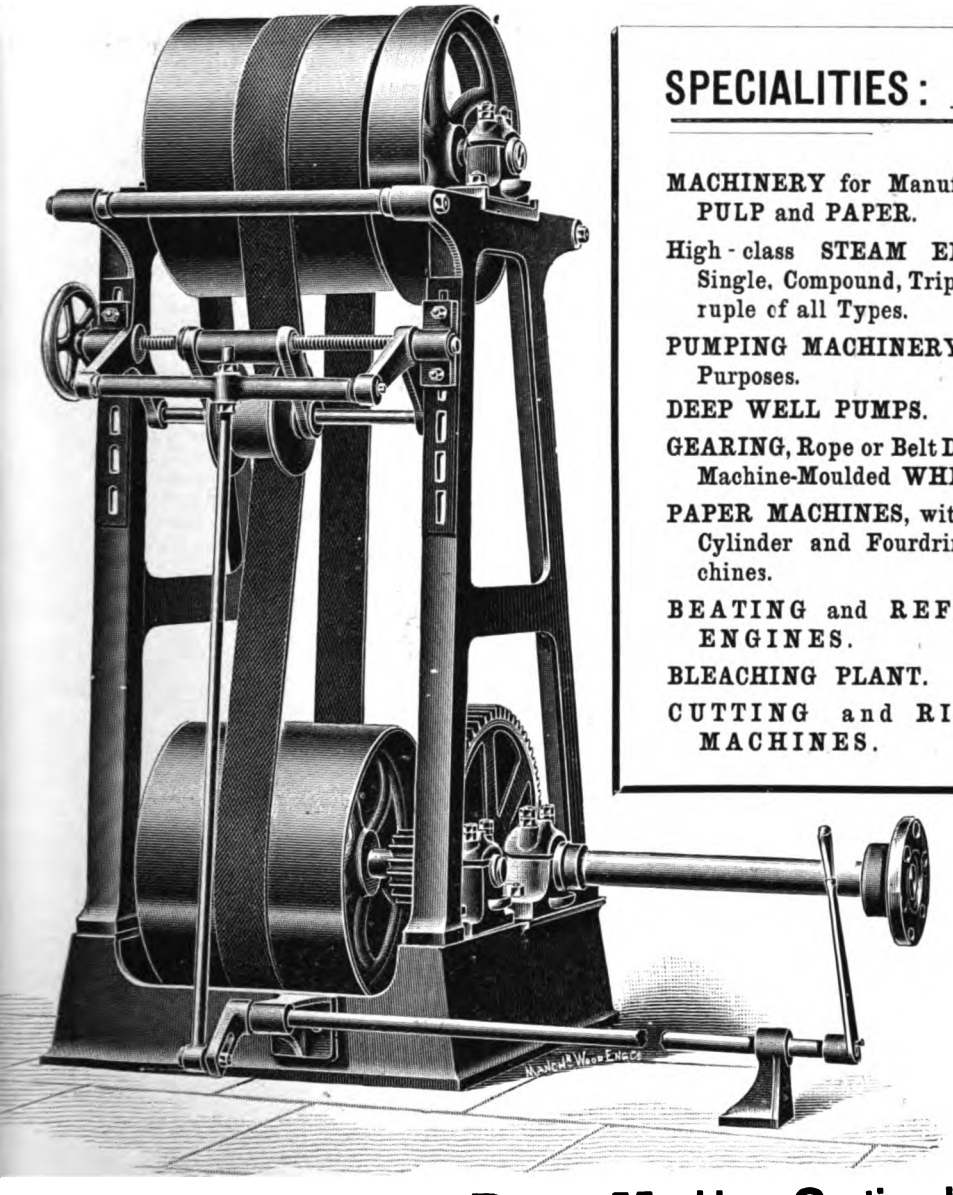
ADVERTISE in this paper! It pays!!

Digitized by Google

CHARLES WALMSLEY & CO., Ltd.,

Papermakers' Engineers,

BURY, near MANCHESTER.



SPECIALITIES:

MACHINERY for Manufacturing PULP and PAPER.

High-class STEAM ENGINES, Single, Compound, Triple, Quadruple of all Types.

PUMPING MACHINERY for all Purposes.

DEEP WELL PUMPS.

GEARING, Rope or Belt Drive, and Machine-Moulded WHEELS.

PAPER MACHINES, with Single Cylinder and Fourdrinier Machines.

BEATING and REFINING ENGINES.

BLEACHING PLANT.

CUTTING and RIPPING MACHINES.

"Walmsley's" Patent Paper Machine Sectional Drive.

CAN BE SEEN AT WORK.

Digitized by Google

Exports of British Paper.

The following returns show the exports of British paper during the week ended Saturday last:—

From London.

PRINTINGS. — To Australia, 809 cwts.; Africa, 187 cwts.; Belgium, 70 cwts.; Cape, 45 cwts.; Canada, 719 cwts.; China, 114 cwts.; France, 297 cwts.; Germany, 159 cwts.; Holland, 26 cwts.; India, 1,430 cwts.; New Zealand, 1,436 cwts.; St. Lucia, 34 cwts.; Sweden, 35 cwts.; S. Settlements, 74 cwts.; United States, 436 cwts.

WRITINGS. — To Australia, 750 cwts.; Africa, 183 cwts.; Argentine, 48 cwts.; Belgium, 11 cwts.; British Guiana, 5 cwts.; Cape, 96 cwts.; Canada, 22 cwts.; China, 276 cwts.; Egypt, 14 cwts.; France, 38 cwts.; India, 618 cwts.; Japan, 8 cwts.; New Zealand, 196 cwts.; Portugal, 7 cwts.; Spain, 32 cwts.; St. Lucia, 5 cwts.; S. Settlements, 8 cwts.; United States, 4 cwts.

OTHER KINDS.—To Australia, 844 cwts.; Africa, 50 cwts.; Argentine, 340 cwts.; Belgium, 30 cwts.; British Guiana, 14 cwts.; Brazil, 2 cwts.; Cape, 113 cwts.; Canada, 9 cwts.; China, 128 cwts.; Channel Isles, 172 cwts.; France, 104 cwts.; Greece 10 cwts.; Germany, 75 cwts.; Gibraltar, 8 cwts.; Holland, 35 cwts.; India, 245 cwts.; Japan, 22 cwts.; New Zealand, 913 cwts.; Port Said, 13 cwts.; Spain, 11 cwts.; United States, 3 cwts.; W. Borneo, 9 cwts.

From Glasgow.

PRINTINGS.—To Australia, 97 cwts.; China, 193 cwts.; Cape, 291 cwts.; India, 259 cwts.; Japan, 84 cwts.; New Zealand, 140 cwts.

WRITINGS.—To China, 125 cwts.; Newfoundland, 6 cwts.

OTHER KINDS.—To China, 17 cwts.; Germany, 5 cwts.

British Imports of Foreign Paper.

The London Customs Bills of Entries show the following arrivals from the countries mentioned during the week ended Saturday last:—

Unprinted.

AUSTRIA-HUNGARY.—21 cases, Bailey and Leetham.

BELGIUM.—54 rolls, R. Ulrich; 13 bales, Friend and Co.; 42 bales, 1 case, Relph and Co.; 9 cases, T. Palmer; 130 bales, Leach and Co.; 11 bales, Bellamy's Wf.; 7 cases, P. Heydemann; 213 bales, J. Harrison; 11 bales, 5 cases, T. H. Lee; 130 bales, Davis and Royle; 362 bales, Sheldon and Co.; 132 bales, J. Cockrill Line; 28 bales, Barber and Co.; 10 bales, Taylor Bros.; 13 bales, Hernu, Peron and Co.

DENMARK.—75 rolls, Dowgate Dk.; 26 bales, R. Ulrich; 100 bales, Trinity Wharf Co.

FRANCE.—30 bales, Taylor Bros.; 4 cases, Atkins and Nisbet; 3 cases, Rosenberg, Loewe and Co.; 3 cases, Pickfords, Ltd.; 30 bales, T. H. Lee; 19 cases, Paul and Co.; 25 rolls, B. and F. Wf. Co.

GERMANY.—3 bales, 111 rolls, Hernu, Peron and Co.; 52 bales, 12 cases, Foley and Co.; 78 bales, 30 rolls, Beck and Pollitzer; 36 cases, Hay's Wf.; 165 bales, R. Ulrich; 62 bales, 8 cases, Argo S. S. Co.; 92 cases, Craven and Co.; 13 bales, 417 rolls, Dowgate Dk. Co.; 57 bales, 39 rolls, Taylor Bros.; 479 bales, W. C. Batchelor; 179 bales, J. Graves; 125 bales, E. and T. Pink; 6 cases, 100 rolls, Blackwell and Co.; 10 bales, Barber and Co.; 1 case, L. and I. D. Co.; 10 bales, T. H. Lee.

HOLLAND.—100 bales, E. and T. Pink; 41 bales, S. E. and C. D. Rly.; 99 bales, Bertram and Co.; 850 bales, 31 cases, 10 rolls, Netherlands S. B. Co.; 98 bales, J. Spurling; 28 rolls, Taylor Bros.; 77 bales, 1 case, W. C. Batchelor; 234 bales, Beck and Pollitzer; 57 bales, Barber and Co.; 42 bales, Little and Johnston; 44 bales, Robinson, Roberts and Co.; 9 bales, O. Schole; 9 bales, Johnson and Sons; 78 bales, Van Dam and Co.; 318 bales, 95 rolls, Hernu, Peron and Co.; 27 bales, Buck and Son.

ITALY.—80 bales, 106 cases, Atkins and Nesbit; 54 bales, Stockwell and Co.; 15 bales, O. Scholzig.

JAPAN.—5 cases, Swire and Sons.

NORWAY.—90 bales, Guppy and Son; 328 bales, 6 cases, Trinity Wf. Co.; 49 bales, 40 rolls, R. Ulrich; 98 bales, J. Graves; 40 bales, Hernu, Peron and Co.; 6 bales, Taylor Bros.; 95 bales, 60 rolls, W. C. Batchelor; 529 bales, J. Spurling; 5 bales, Sabel and Co.; 13 bales, Co-operative Wholesale Society; 98 bales, Lovell and Sons; 13 bales, Spicer and Sons.

SWEDEN.—6 bales, 371 rolls, Dowgate Dk. Co.; 55 bales, 38 rolls, J. Spurling; 5 bales, Tegner, Price; 60 bales, Litchfield and Soundy; 138 bales, Johnson and Sons; 241 bales, 928 rolls, Taylor Bros.; 28 bales, Foley and Co.; 194 bales, 46 rolls, Vokins and Co.; 105 bales, Hernu, Peron and Co.; 164 bales, 144 rolls, M. D. Co.; 40 bales, Spicer and Sons; 16 bales, R. Ulrich; 30 bales, 215 rolls, Beck and Pollitzer; 388 bales, W. C. Batchelor; 709 bales, 817 rolls, Trinity Wharf Co.; 146 bales, Crabb and Co.; 62 rolls, Bott and Co.

UNITED STATES.—280 rolls, Taylor Bros.; 171 cases, Beck and Pollitzer; 177 bales, 103 cases, Lunham and Moore; 14 cases, Sheldon and Co.; 26 cases, W. Davies; 1 case, Field and Co.; 16 cases, W. Dixon; 10 cases, B. and F. Wf. Co.

Printed or Coated.

BELGIUM.—206 bales, J. Cockrill Line.

CANADA.—7 cases, Meadows and Co.

GERMANY.—7 cases, R. Ulrich; 3 bales, 1 case, O. Scholzig; 94 bales, 1 case, L. and I. D. Co.; 57 bales, Argo S. S. Co.

HOLLAND.—64 bales, S. E. and C. D. Rly.; 55 bales, 8 cases, Netherlands S. B. Co.

ITALY.—1 case, Barber and Co.; 5 cases, Davies, Turner and Co.; 1 case, Tyler and Sons.

Digitized by Google

UNITED STATES.—6 cases, W. Dixon; 101 cases, Lunham and Moore; 9 bales, 91 cases, Peabody and Co.; 8 cases, Rothmann and Co.; 8 cases, L. and I. D. Co.; 38 bales, Claydon and Co.; 2 cases, Sheldon and Co.; 13 cases, Downing and Co.

Unclassified.

The paper imports (unclassified) at the principal provincial ports during the week ended Saturday last were :—

From Austria, 225 bales; Belgium, 1,836 bales, 6 cases, 85 rolls; Canada, 184 bales; Denmark, 79 bales, 1 case, 135 rolls; France, 809 bales, 217 cases; Finland, 1,124 bales; Germany, 1,497 bales, 48 cases, 434 rolls; Holland, 1,010 bales, 148 cases; Italy, 44 bales; Norway, 1,241 bales, 201 rolls; Sweden, 1,206 bales, 189 rolls; United States, 1,715 bales, 54 cases, 152 rolls.

Foreign Strawboards, &c.

The imports of straw, mill, and wood pulp boards, etc., at British ports during the week ended Saturday last were :—

STRAWBOARDS.—From Belgium, 620 bales; France, 71 rolls; Holland, 39,260 bales, 112 rolls.

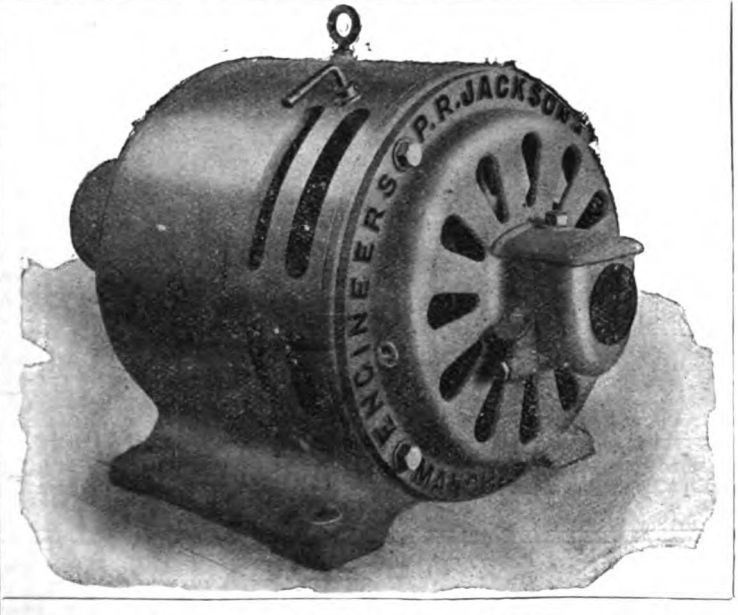
WOOD PULP BOARDS.—From Finland, 8 bales; Germany, 840 bales; Holland, 21 bales; Norway, 56 bales; Sweden, 56 bales; United States, 298 bales, 51 rolls.

MILLBOARDS.—From Germany, 343 bales; Holland, 21,946 bales, 40 rolls.

PASTEBOARDS. — From Australia, 913 bales; Finland, 8 bales; Germany, 416 bales, 6 cases; Holland, 6,607 bales; Sweden, 5 bales.

CARDBOARDS.—From France, 19 bales; Germany, 4 bales.

CUBAN TARIFF.—American shippers of paper to Cuba complain that the recent change in the tariff have caused considerable trouble. The increase of 30 per cent. on wrapping papers makes it impossible, it is stated, for Americans to compete in the Cuban market. With the exception of newspaper in rolls, all kinds of paper imported into Cuba pay some duty. In "news" the Cubans prefer light weights, to supply which Americans demand an increase in price, and consequently business is diverted into the hands of the Germans. In most kinds of paper preference seems to be given to German and English houses, exporters in the countries named evidently being familiar with the peculiarities of foreign trade. The Americans, it may be stated, enjoy a 20 per cent. reduction from the tariff according to the terms of the reciprocity treaty. In view of the increase in the tariff made by the Cubans, parties interested are looking to the United States Government to take some action in the matter.



Cut Your Expenses Down

by installing

ELECTRICAL PLANT

made by

P. R. JACKSON & Co., Ltd.,

SALFORD ROLLING MILLS, MANCHESTER,

WITH WHOM YOU SHOULD COMMUNICATE.

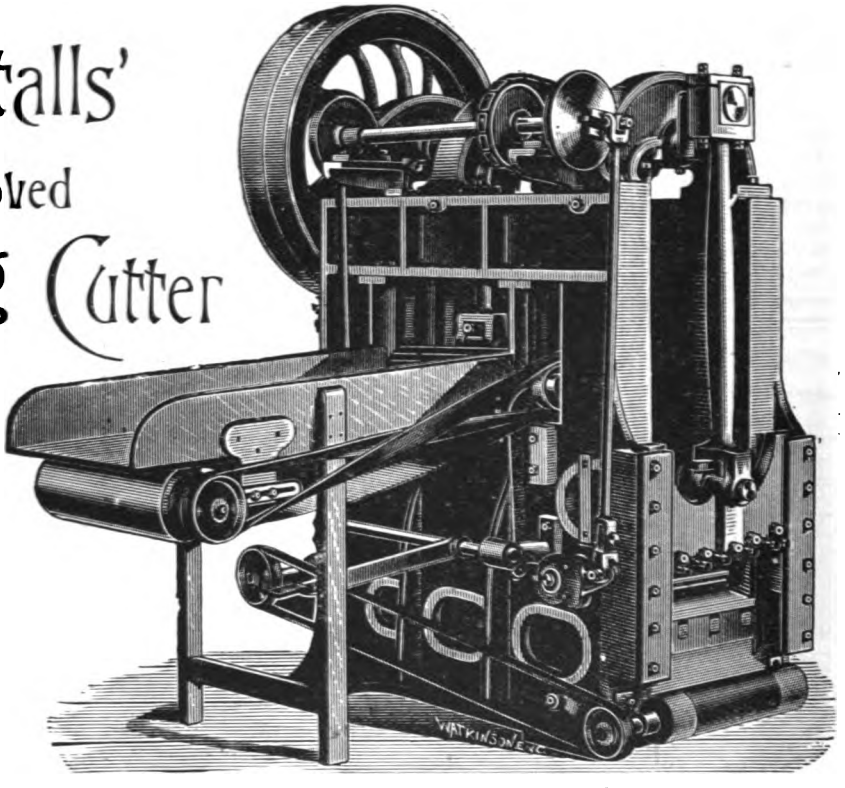
Digitized by Google

BENTLEY

Papermakers'

BURY, near

Nuttalls' Improved Rag Cutter



This Machine has now been Greatly Strengthened and Simplified, and its Output Capacity Increased. It is Equally Effective upon the Strongest and Lightest Materials, and will Cut Every Class of Stock.

Sole British Makers of the

NO WELL EQUIPPED PAPER

FULL PARTICULARS

Digitized by Google

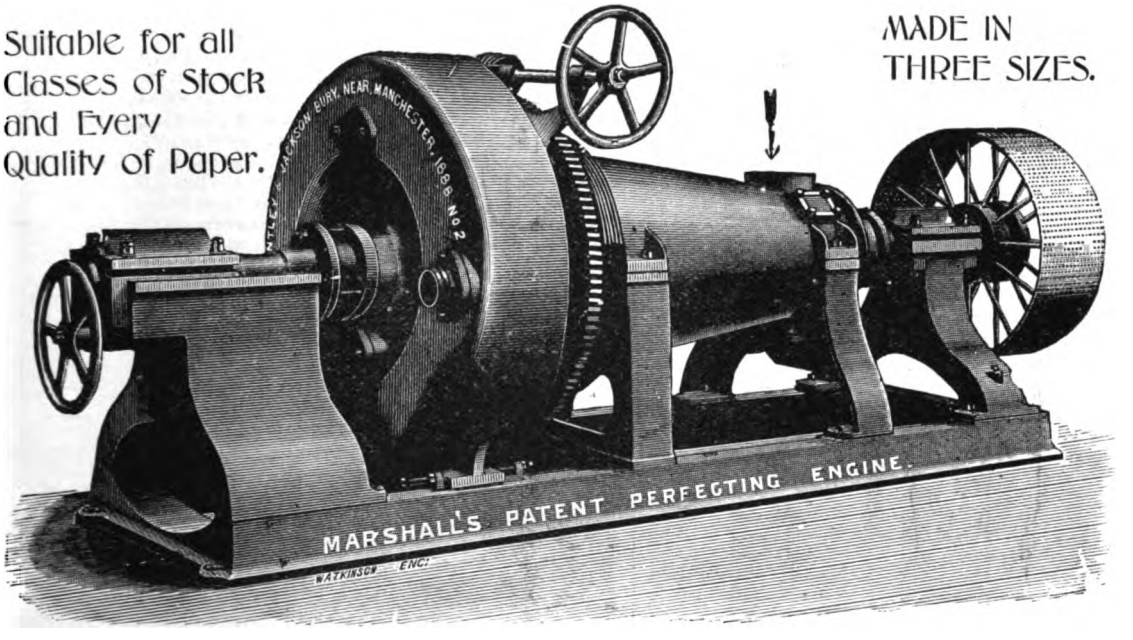
and JACKSON LIMITED.

Engineers, MANCHESTER.

Marshall's PATENT Perfecting Engine

Suitable for all Classes of Stock and Every Quality of Paper.

MADE IN THREE SIZES.



This Engine will produce a Better Finished, Stronger, and More Even Sheet of Paper from the same Materials than can be produced by any other Mechanical Process, and at the same time will REDUCE the TIME and POWER Required for Beating.

COBURN-TAYLOR Machine.

MILL SHOULD BE WITHOUT.

ON APPLICATION.

Digitized by Google

Paper for Decalcomania.

In preparing paper to be used in the art of transferring pictures and designs to china, glass, marble, etc., some improvements are claimed by Mr. E. Seidel, of Maulburg, Duchy of Baden. In many industries, especially that of pottery, he says hand designing is replaced by decalcomania on the smallest plane surfaces, curves and projections. It is pointed out that the paper for this purpose must be thin, and of a weight not exceeding 30 to 35 grammes per square metre. Paper generally used for this purpose is unsuitable, as a thin unsized tissue paper will not support the ground charge nor allow printing in a number of colours. Mr. Seidel introduces a light unsized tissue furnished with a firm foundation of sized paper closely united, so that the tissue paper will be able to support working and pressure in the press. The foundation paper allows, it is claimed, a separation of the printed paper without causing the least injury to the design, which alone remains fixed on the porcelain object.

Canadian Notes.

PAPER FOR ONTARIO PUBLIC PRINTING.—The contract for the paper supplies required for the next five years for printing statutes and departmental reports of the Ontario Legislature has been awarded to the Riordan Paper Mills Co., of Merritton. The prices, it is stated, will result in a saving of 1,500 dols. per year as compared with the last contract. Fourteen samples were included in the contract, the following being the prices:—

			Per Ream.
Sample No.	A	on a basis of 27 × 41—55	$2.72
,,	B	,, 27 × 41—55	2.53
,,	C	,, 27 × 41—55	2.70
,,	D	,, 27 × 41—55	3.02
,,	E	,, 27 × 41—55	2.90
,,	F	,, 27 × 41—55	2.43
,,	G	,, 27 × 41—55	2.72
,,	H	,, 27 × 41—55	2.75
,,	I	,, 27 × 41—55	2.75
,,	K	,, 27 × 41—55	2.65
,,	L	,, 27 × 41—55	2.85
,,	M	,, 25½ × 30—46	1.85
,,	N	,, 25½ × 30—46	1.95
,,	O	,, 25½ × 30—46	1.82

CANADIAN TRADE WITH NEW ZEALAND.—According to Mr. J. S. Larke, the commercial agent of the Dominion Government in Australasia, the preference which New Zealand has recently conceded to Britain and Canada should be of benefit to Canada's export trade in several lines, including news paper, wrapping paper, and wall paper. One change in the new tariff does not take effect wholly at once. This is the duty on printing paper. On contracts already made it is to be suspended for three years, so that all paper ...v purchased abroad, for future delivery ... Zealand, will be admitted free of duty ... ee years. "There is, nevertheless," says the agent, "an inquiry for Canadian paper now. It had previously been sold to some extent, and had the Canadian mills been prepared to have undertaken the trade, large contracts could have been secured. The chief trouble is the freight charges. Though the Canadian Pacific Railway is giving exceptionally low through rates, they are still higher than the charges on paper from Norway or the United States, *via* New York. If Canada could secure the New Zealand trade it would mean a freight of a thousand tons a month, and thus go very far towards warranting a monthly ship."

French-American Trade.

It is reported from Washington, D.C., that a bill has been introduced in the House of Representatives to carry into effect the provision of a convention signed at Washington, July 24th 1899, between the United States and France, under authority of the Act of July 24th, 1897. The bill provides that articles of merchandise, the product of the soil or industry of France, designated in the schedule forming part of the bill shall be admitted into the United States on payment only of the reduced rates as declared and set forth in the schedule referred to, and no port or other charges of any kind shall be imposed upon such merchandise prior to its entering into consumption except such as are equally applied to importations from all foreign countries. The bill further provides that no prohibitions or restriction of the importation of any of the products of France shall be made except such as shall equally apply to like products in the like condition arriving from any other country.

The items of interest to the trade in the schedule referred to are as follows:

Paper.—Copying, filtering, blotting and surface coated paper, or paper covered with metal or its solutions, parchment, sensitised paper for photographic purposes, as described in paragraphs 397 and 398 of the United States tariff, 10 per cent. reduction; letter paper, hand-made, paragraph 401, 10 per cent. reduction; envelopes, paragraph 399, blank books, paragraph 403, albums, paragraph 404, and articles of paper, paragraph 407, each 10 per cent. reduction.

It is provided that France shall, by proper legislation, agree, on her part, that all articles of merchandise being the product of the soil or industry of the United States excepted to France shall be admitted upon payment only of the minimum rates of duty imposed on the like articles of any other origin, with the same stipulation regarding port or other charges applying to the United States.

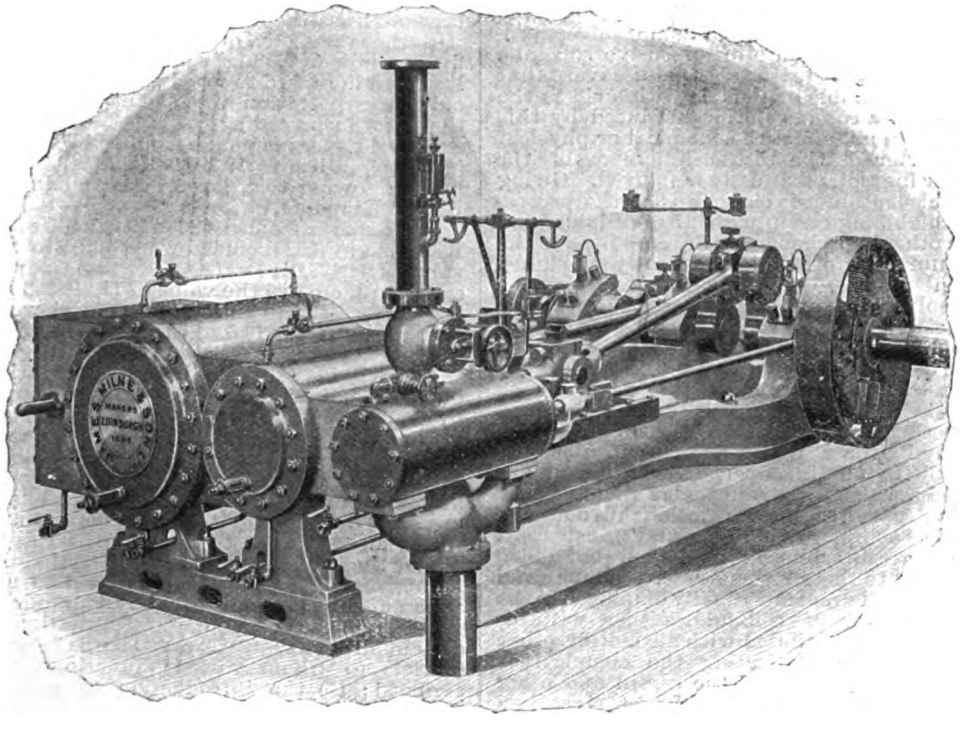
The bill provides that rough cardboard, in sheets, imported into France, is expected from the provision respecting the minimum rates of duty. The Act is to take effect upon the issuance of a proclamation by the President of the United States announcing that France has, by appropriate legislation, complied with her part of the mutual convention above mentioned.

Digitized by Google

JAMES MILNE and SON,
LIMITED.

MILTON HOUSE WORKS,

EDINBURGH.



Automatic Expansion Compound Steam Engine with Shaft Governor and Balanced Piston Valve.

High Speed Paper Machines, Paper Cutters, Patent Reelers, and All Accessories.

Estimates Furnished and Repairs Effected at Shortest Notice.

Telegrams:—"MILNE. EDINBURGH." ABC Code, 4th and 5th Editions.

Telephone No. 792

Digitized by Google

"CELLULOID" FROM Casein and Nitro-Cellulose.

THE USE OF GLACIAL ACETIC ACID.

The Casein Company of America have been granted a British patent relating to the production of a composition having the characteristics of celluloid consisting largely of casein and nitro-cellulose.

A common solvent, glacial acetic acid has been discovered for the casein and nitro-cellulose; so that by the use of this acid these two substances can both be dissolved and thus combined into a homogeneous product without the use of expensive solvents. One important feature of this discovery that casein is soluble in glacial acetic acid is the fact that a casein solution produced by this acid does not affect the chemical or physical character of the nitro-cellulose or of the other ingredients usually employed. Owing to this feature it is claimed that the process of combining casein with nitro-cellulose and the other ingredients usually employed in the manufacture of celluloid is greatly simplified.

In practice the nitro-cellulose may be dissolved in any suitable manner, either by glaciacetic acid or any other proper solvents. To dissolve ordinary commercial casein for the celluloid-like composition, either in a dry or wet condition, about equal parts of the casein and glacial acetic acid are mixed together, and the mixture is then preferably heated over a water bath or in a jacket-kettle to obtain a perfect solution of the casein, which will be effected in about twenty minutes, and the casein solution thus obtained will be comparatively clear and transparent. This casein solution can then be added directly to the solution of nitro-cellulose and the other ingredients usually employed in the manufacture of celluloid, either with or without being diluted with alcohol or other substances not affecting the chemical or physical character of the casein and other ingredients of the celluloid-like product, in a proportion of say about 100 parts of the casein solution to 200 parts of the nitro-cellulose solution, and the whole mixture will then be stirred or agitated in any suitable manner, and quickly combined into a homogenous product or mass which can be worked by any of the usual methods or machines employed in the manufacture of celluloid.

The invention is, however, not to be understood as being limited to the above-mentioned proportions of casein and nitro-cellulose; as, while a mixture of 100 parts of the casein solution to 200 parts of the nitro-cellulose solution will give a product not inferior to ordinary celluloid, but considerably cheaper; still cheaper celluloid-like products may be made by using larger percentages of casein and smaller percentages of nitro-cellulose. Also instead of dissolving the casein and nitro-cellulose separately, these ingredients may be mixed together in the desired proportions and the mixture then be dissolved by the glacial acetic acid, owing to the fact that this acid is a common solvent for both substances. Also the invention is not to be understood as being limited to the use of glacial acetic acid; as any other equivalent acid or acid salt which will dissolve both the casein and nitro-cellulose will be included.

Trade of Sweden.

NEW FORESTRY LAWS.

A report has recently been published by the Foreign Office from Mr. F. S. Clarke, secretary of H.M. Legation at Stockholm, dealing with the trade, etc., of Sweden, 1902–4. The figures, however, chiefly deal with the year 1902, and in regard to wood pulp it is pointed out that exportation varied but little from that of the preceding year. The value of exported paper increased from 16,197,292 kr. (£899,850) in 1901 to 19,193,681 kr. (£1,066,320) in 1902, owing to a larger demand in the United Kingdom.

The exports from Sweden to the United Kingdom in 1902 included wood pulp to the value of 14,435,041 kr. (£801,940), and paper, cardboard, etc., to the value of 11,816,906 kr. (£656,500). The quantity of chemical wood pulp received was 13,016,356 kr., and mechanical 1,418,685 kr.

A series of laws for the better preservation of woods and forests in Sweden were passed by Parliament towards the close of the session, and came into force from January 1st last. Among the principal provisions of these new measures are (1) that timber on private properties is not to be felled in a measure detrimental to reproduction, and that the soil is not to be treated so as to hinder the fresh growth of trees; (2) that the felling of timber in woods exposed to the action of shifting sands is to be under official control; (3) the creation and organisation in certain districts of "forest boards" with officials to whom various functions are assigned; (4) the introduction of certain modifications and new regulations as regards woods owned by towns, churches, schools, hospitals, or any other public institutions; (5) that leases of forests are not to exceed 50 years, and that where timber is concerned the leases are to be limited to five years.

The total area of land covered by forest in Sweden in 1902 was put down at some 20,900,000 hectares (about 80,000 square miles). Of this area about 3,350,000 hectares (say 13,000 square miles) belong to the State, while the rest is private property. In this latter category are included woods belonging to communes, towns and villages.

DULCOTE LEATHER-BOARD CO., LTD., NEAR WELLS.—Lien registered, March 16th, for £350 six per cent. "A" debentures, part of £2,000; amount previously issued, £900; charged on the undertaking, and all the property, including the uncalled capital.

Digitized by Google

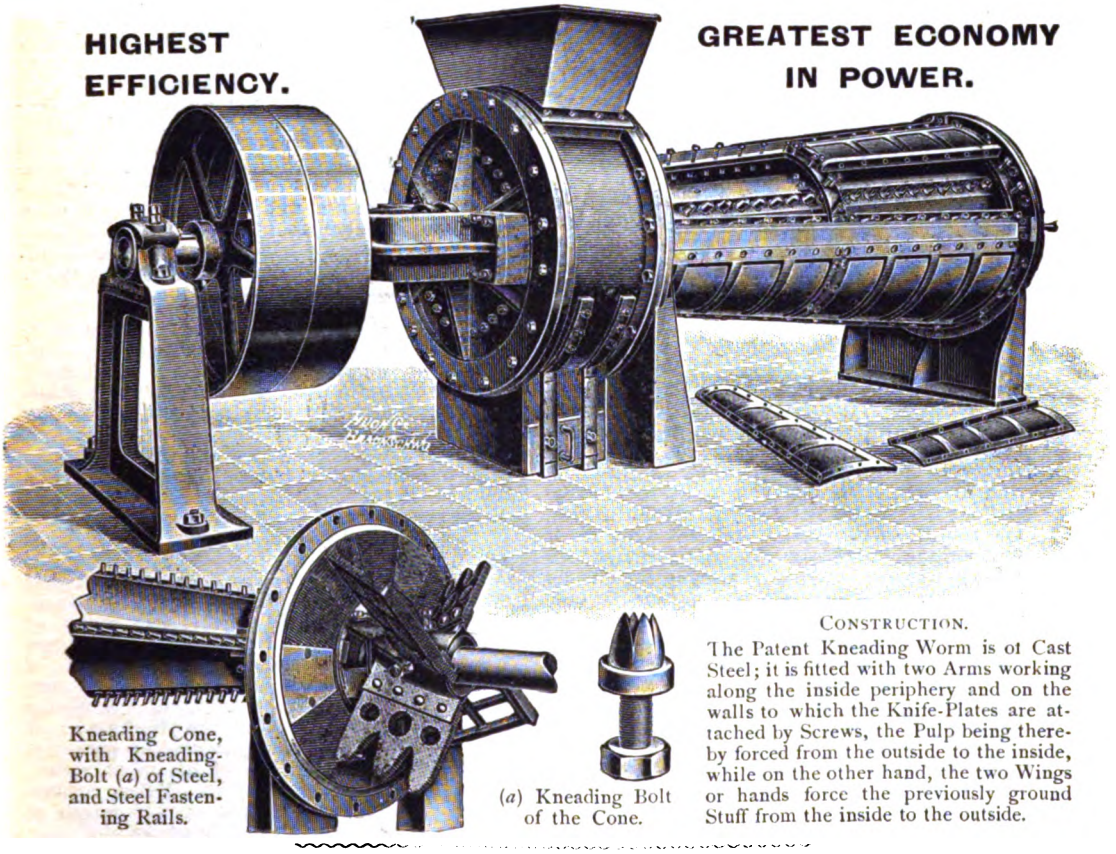
English Patent—No. 18,417. American Patent—No. 730,617.

Robert Dietrich's Kneader

FOR PULPING PAPER STOCK.

HIGHEST EFFICIENCY.

GREATEST ECONOMY IN POWER.



Kneading Cone, with Kneading-Bolt (*a*) of Steel, and Steel Fastening Rails.

(*a*) Kneading Bolt of the Cone.

CONSTRUCTION.

The Patent Kneading Worm is of Cast Steel; it is fitted with two Arms working along the inside periphery and on the walls to which the Knife-Plates are attached by Screws, the Pulp being thereby forced from the outside to the inside, while on the other hand, the two Wings or hands force the previously ground Stuff from the inside to the outside.

ADVANTAGES:—

1.—SIMPLICITY OF OPERATION; GREATEST ECONOMY IN POWER at the LOW SPEED of 90 REVOLUTIONS per minute; Substantial Construction; Stronger than all known Kneaders.

2.—ONLY ONE SHAFT; NO SPUR GEARING REQUIRED; CHOKING-UP BY IRON AND STRING AVOIDED.

3.—Fitted with a STONE, SAND and IRON TRAP underneath the Patent Kneading Worm that draws in the Paper, thus obviating damage to the Kneading Mechanism.

4.—Fitted with STRING, ROPE, and RAG TRAPS, easily cleaned while the machine is running; even without these Traps a portion of String, Rope, and Rags adheres around the Kneading Worm from which they may easily be removed by merely shifting the belt to the loose pulley.

5.—Manufacturers of Wrapping Paper are enabled to use unsorted waste paper or "broken"; other kneaders would be choked by string and rope. Wrapping Paper from waste paper, "broken," straw paper, and cardboard can be made WITHOUT THE USE OF A BEATER.

6.—VERY LARGE FEED AND DELIVERY OPENINGS and almost UNRESTRICTED CAPACITY for "broken" paper on account of the large Arms and Wings of the Kneading Worm; the Kneading Wings are serrated on all their edges and work against Toothed Steel Knife Plates, hence ready tearing of "broken" paper, and even cardboard and paper tubes may be worked up by the machine.

ROBT. DIETRICH, Merseburg, GERMANY.

Digitized by Google

United Alkali Co., Ltd.

Annual Meeting.

Mr. John Brock (chairman of the Board of Directors), who presided over the ordinary general meeting held at Liverpool on Friday last week, fully referred to the position of the company last year with regard to the German manufacture of bleaching powder. He mentioned the ever larger and larger demands made upon them by the German manufacturers as to the admission of their goods into this country, and that they had, after giving way on several previous occasions, felt bound to make a stand, with the result that the agreement formerly existing between them limiting their imports was not renewed. This meant that both entered into active competition for the British market, and also to a considerable extent for the American market, resulting in a smart fall of about 40 per cent. in the selling price. He was glad to say that in the quantity placed they more than maintained their own, while the monetary results were fully as good as expected, and proved, undoubtedly, that their methods of manufacture, as to economy of production, were quite equal to, and in some cases superior to those of competitors, both foreign and English. About the middle of the year overtures were made to them to reconsider the position, and see whether terms could be arranged for ending the fight. They stated willingness to consider favourably any fair proposal; negotiations were entered into, and resulted in a temporary arrangement being made which is now in operation, and which for the present has put an end to the severe competition which existed during the whole of 1903. Whether this temporary arrangement will be continued, time alone will show. Prices had somewhat improved, but are still considerably below the average of 1902. In the course of last year a property in Spain was offered to the company on easy terms, which, after careful examination and trial of the ore, they decided to purchase. (Hear, hear.) This step had been taken in no spirit of antagonism to their friends who had hitherto supplied them, and with whom they hoped to remain in friendly connection for many years to come, but simply for greater security, and in pursuance of the policy that when suitable opportunities offer of acquiring more control over the supply of the raw materials they will be wise in embracing them, if after careful inquiry and consideration it seems desirable to do so. The share capital remained the same as last year. The debenture stock stood at £2,741,560, or £35,000 higher than last year. The gross profit was £385,185, or £48,843 less than last year; this was accounted for by the great fall in the selling price of bleaching powder and all chlorine products, lower prices for caustic soda, saltcake, purple ore, and some other articles, which would have been much larger if they had not been able to effect economies in the buying of raw materials and in other directions. The net profit, after payment of debenture interest and all other charges was £202,635, to which was added the balance brought forward from 1902 (£80,289), and, after deducting £15,000 transferred to the debenture redemption fund account, a balance remained of £267,925, which they proposed should be apportioned as follows:—Interim dividend on preference shares at 7s. per share for six months to 30th June, 1903, paid August 31st, 1903, less income-tax, £93,527; final dividend on preference shares at 7s. per shares for six months to 31st December, 1903, payable 29th March, 1904, less income-tax, £94,351; carrying forward £80,047. In conclusion, the chairman proposed the adoption of the report and statement of accounts, and the declaration of a dividend as recommended by the directors. Mr. E. K. Muspratt (vice-chairman) seconded, and the resolution was carried unanimously.

THE April *Windsor Magazine* is a particularly fine Easter Holiday number, containing a long, complete story by Robert Barr, written in that popular author's happiest vein, and very strikingly illustrated by the well-known American artist, Harrison Fisher, and several other complete stories. The more notable among the latter are a delightful yarn, entitled "'Good Humour' Wins the Marble Soap Advertisement," which is the latest story in Jerome K. Jerome's popular series, "Tommy and Co.;" another complete adventure even more remarkable than its predecessors in Mrs. C. N. Williamson's vivid and sympathetic life story of "The Girl who had Nothing and Wanted Everything;" and a large instalment of Justus Miles Forman's fascinating new romance, "The Garden of Lies." A really interesting interview with the chief artist of Modern Bulgaria is accompanied by some remarkable reproductions of his most representative pictures; Eustace Miles contributes an interesting paper on the game of "Fives," with many good illustrations, and the more technical subject on the making of electric lamps has a real instructive value. It is pointed out that lamps from abroad are frequently—indeed, generally—sold at prices much under those charged for lamps of English manufacture. The difference is accounted for not so much by inferiority of materials, as by the thorough and conscientious manner in which English makers reject all lamps that do not successfully endure a very elaborate series of tests, the wastage frequently amounting to no less than a third. A lamp of Continental origin *may* be as good, but the chances are very much against it. It is worth while to pay a trifle more for certainty. Another thing. The life of a well-made lamp is calculated at about a thousand hours. Many users, with a mistaken idea of economy, continue to burn their lamps long after they have blackened and gone dull. It is a foolish policy, for one new lamp gives a light equal to two old ones, and costs only half as much for current.

Digitized by Google

Hemp Stalks.

A Waste Product in Growing Use in Italian Paper Mills.

Hemp stalks, according to Mr. Saverio Ragno, engineer, are now largely used in the manufacture of packing paper, etc., in Italy. Considerable developments have taken place during the last few years, although experiments were made some twenty years ago by Mr. A. Myallonier, at the San Cesario Paper Mill, near Castelfranco. The paper mill of Serravalle and the Royal Works at Treviso commenced some time back to manufacture paper from hemp stalks.

It is pointed out that the fibre is rather longer than straw, and contains a greater percentage of cellulose. The following analysis is of interest:—

	Stalks from	
	Castelfranco Emilia.	Marcianise Caserta.
Water	10·62	10·75
Ash	1·70	2·17
Soluble in Water ...	4·31	4·23
Fat or Wax	2·08	1·57
Cellulose	60·18	59·04
Incrusting Matter ...	10·57	11·12
Proteinous Substances	10·54	11·12

The observations of Mr. Ragno show that the stalks are slightly soiled with mineral matter, and consequently will be suitable for manufacturing paper in mills where economical methods of washing straw are applicable. Experiments demonstrate that the material can be either boiled or treated cold in masonry tanks. The only difference is that it requires double the length of time compared with straw.

In the Myallonier Paper Mill tanks (cylindrical) are employed about 12 feet deep and with a capacity of 706 cubic feet. Treatment is operated with milk of lime, and takes a maximum of 36 hours.

In the Panzano Mill the cold method is preferred, in which case it requires 14 to 15 days in summer, and 20 to 22 in winter. As the stalks have no knots they steep uniformly and give, after grinding, a very homogeneous pulp. The proportion of lime recommended is 15 to 25 per cent. more than the quantity required for straw. Disaggregation is complete when the fibres of a piece of stalk divide under pressure of the finger, and are of a uniform reddish yellow colour. The pulp is then removed from the tanks and after a day or two sent to be washed and ground.

Mr. Ragno refers to the successful methods of treatment at the San Cesario and Penzano Mills, and, judging hemp fibre both from a chemical and structural point of view, gives it as his opinion that a slight profit derived from waste stalks will tend to the further development of an important agricultural product.

New British Patents.

APPLICATIONS.

6,668. Improvements in the means of introducing water and other liquids to rag and other pulping engines for papermaking and other purposes. T. T. M. Lumsden, and A. B. Pearce.

6,697. A new or improved manufacture of bleaching powder. J. S. Rigby.

PATENT SPECIFICATION PUBLISHED. 1904.

10,590. Manufacture of endless blankets such as are used in printing, papermaking and other machines. Mitchell.

In discussing the necessity of economy in paper mills, the *Papier Zeitung* states that the difficulty is to control the action of the men. Our contemporary says an experiment has been made in some places in which half the amount saved by the exercise of care and attention has been distributed among the workers. The saving in various directions as a result has been marvellous.

The good advertiser is ever ambitious to do better advertising.—*Printers' Ink.*

Telegraphic Address: "APSLEY, LIVERPOOL." Telephone: 332.

MAKIN & BANCROFT, Codes { A B C, 4th Edition, Liebers, Private.

Apsley Buildings, 4, Old Hall Street, Liverpool.

SOLE BRITISH AGENTS FOR THE SAULT STE. MARIE PULP & PAPER Co.,

ONTARIO, CANADA.

Direct Importers of All Papermakers' Materials.

Now Ready. 44th Edition. Price 2/6 net, Post Free.

THE PAPER MILLS DIRECTORY for 1904,

Containing a List of the Paper Mills in the United Kingdom, with Full Particulars of their Manufacture, and much useful Information in connection with the Paper Trade indispensable to all connected therewith.

London: SIMPKIN MARSHALL & Co., Limited, Paternoster Row: and all Booksellers

Also for remittance of Stamps or Postal Order of the Editor, 27, Pilgrim Street, Ludgate Hill, London, E.C.

Digitized by Google

WORLD'S PAPER TRADE REVIEW.
Office: 58, Shoe Lane, E.C.

TRADE NOTES.

MR. DANIEL MCMASTER, in addition to being appointed general manager of the Oxford Paper Co., Portland, Maine, U.S.A., has been elected vice-president and director. Mr. Edwin Riley succeeds Mr. W. Pettengill as president.

A DARING highway robbery took place at Widnes, on Friday, in broad daylight. Thomas Swinton, who is cashier at the United Alkali Company's Works, was returning from the bank with a bag containing £450 with which to pay the workmen, when he was suddenly attacked by two men, one of whom struck him violently on the head, and seized the bag of money which he was carrying. The men had a trap, in which one of them remained, whilst the other, who was masked and had his face blackened, perpetrated the outrage. Their object having been accomplished, they drove rapidly away.

"DIRECTORY OF PAPERMAKERS."—We have received from Messrs. Marchant Singer and Co., of 47, St. Mary-axe, E.C., a copy of the "Directory of Papermakers" for 1901. This well-known publication, with its excellent classification, has been carefully revised. The contents include an alphabetical list of papermakers in England, Wales, Scotland, and Ireland, lists of paper enamellers, etc., papermakers' representatives, London wholesale stationers, etc. Mill numbers are given, also mills in alphabetical order, with names of occupiers, and mills in various counties, together with a classification of makes with makers' names, etc. A valuable feature of the directory is the inclusion of trade designations used as watermarks, etc., numbering over 5,500, and for reference purposes is of great value to printers and stationers. The printing is well done, and the business announcements tastefully displayed, there being an index to advertisers, and also trade tables, etc.

RATING OF MACHINERY.—An influential and well attended meeting of members of Parliament favourable to the Rating of Machinery Bill was held on the 22nd ult., and satisfaction was expressed at the result of the debate on the Second Reading of the Bill on March 18th, when a substantial majority was obtained, in spite of a small House and a somewhat unexpected debate. The desirability of removing the objection taken to the provisions of the measure by members of Parliament representing particular localities in England was considered, and in view of the misconceptions which apparently exist in these districts as to the effect of the operation of the Bill, it was decided to immediately appoint a sub-committee for the purpose of taking steps to satisfy these particular opponents that their apprehensions are in fact without foundation. The form of the sub-committee was not definitely decided upon, but the following members of Parliament were elected to act, with power to add to their number:—Sir W. H. Holland, Sir W. H. Houldsworth, Sir W. E. M. Tomlinson, Sir Edward Strachey, Sir John Rolleston, Mr. Alfred Emmott, Mr. D. J. Shackleton, Mr. George White, and Mr. Edward Chapman. The feeling was also expressed that the Machinery Users' Association should, through its officials, act in direct co-operation with the above sub-committee.

"ENGLISH" HAND-MADE PAPER IN THE STATES.—A correspondent who has seen the paragraph about this which appeared in our issue of February 26th, is curious to know where the Eaton-Hurlbut Paper Co. obtained men competent to make vat paper. The only hand-made plant in the States for many years past has been that of the L. L. Brown Paper Co., at Adams, Mass., and even they only possess—or did until quite recently—one vat, which was worked by the sons of a former member of the Original Society of Papermakers, and turned out only a very limited amount of paper.

GUIDE ROLLERS FOR PAPERMAKING MACHINES.—Mr. W. H. Stobie has been granted a British patent relating to guide rollers. The object is to provide the guide roller with a covering of rubber, felt, or other frictional cover, to make the wire or felt more sensitive to the action of the roller, or in other words, to prevent slipping of the felt or wire on the roller.

PATTERN CYLINDERS FOR PAPER LACE.—A British patent has been granted to Mr. M. Heimann, of Berlin, relating to improvements in pattern cylinders for use in the manufacture of paper lace and the like. Engraved untempered steel pattern cylinders are usually used, which work in conjunction with a lead cylinder, or engraved tempered steel pattern cylinders are used working with similarly tempered smooth steel cylinders below them. According to the patentee, with the tempered engraved pattern cylinders, which work against similar smooth cylinders, it is impossible to manufacture fine paper lace, and his improvements consist in putting into rotation under pressure a tempered and untempered steel cylinder until the engravings of the tempered cylinder (which is provided with untempered steel rings) are impressed deep enough in the untempered cylinder to ensure a uniform cutting of the paper.

METALS.—Under the date of Wednesday last, Messrs. I. and J. Hyman, metal merchants, Britannia-street, Kings-cross, quote (subject to market fluctuations) their prices for Old Scrap Metals:—

	Per Ton.
Clean Copper	£51 0 0
Tinned or Braziery Copper	47 0 0
Gun Metal	47 0 0
Brass	37 10 0
Old Zinc	17 0 0
New Zinc Cuttings	19 0 0
Lead (subject to usual 4-lbs. per cwt. tare)	11 0 0
Hollow Pewter	92 0 0

A FACT that should have weight with advertisers is the large circulation of the *World's Paper Trade Review* at home and abroad.

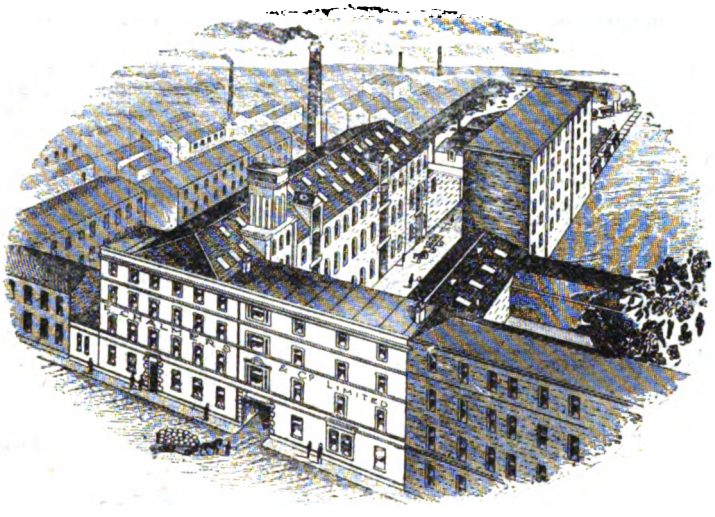
Digitized by Google

Telegrams: "GILES, LEITH." Telephone: No. 465.

E. CHALMERS & Co., LIMITED.

BONNINGTON, LEITH.

Linen Rags,
Cotton Rags,
Canvas,
Hemp Ropes,
Manilla Ropes,
Jute & Flax Bagging,



Woollen Rags, For Filter and Silurian Papers.
New Linen and Cotton Cuttings,
Waste Papers,
Paper Shavings &c., &c.
All thoroughly well classed.

ENQUIRIES INVITED. SAMPLES ON APPLICATION.

N.B.—CASH OFFERS made for Disused Paper or other Works for Dismantling purposes.

Akt.-Ges. für Maschinenpapierfabrikation Aschaffenburg,

MANUFACTURERS OF

BLEACHED and UNBLEACHED

Sulphite Wood Pulp

— Mitscherlich and Ritter-Kellner Systems —

Of finest quality, excellent strength, length of fibre and colour. Daily production 120—130 tons dry weight.

Mills at { *Aschaffenburg a. Main. Stockstadt a. Main.*
Walsum a. Rhein (formerly Niederrheinische Zellstoff A.-G.).

Sole Agent: HARRY B. WOOD, CATHEDRAL STREET, MANCHESTER.

WILLIAM MAKIN & SONS,

Attercliffe Steel Works, Sheffield, England.

(ESTABLISHED A.D. 1736).

PAPERMAKERS' STEEL and BRONZE TOOLS.

Illustrated Catalogues and Price Lists, in French and English, on Demand.

STRAW PULP.

The VEREINIGTE STROHSTOFF-FABRIKEN COSWIG-SAXONY

Recommend their First-class Bleached Dry STRAW PULP. Unequalled in Whiteness and Purity. Strong and Felty. Warranted free from clays and colours. Used by Leading Paper Mills in Europe and U.S.A. Daily production 60 Tons Dry STRAW PULP. Exposition Universelle de Paris, 1900, "GRAND PRIX." *Sole Agents for—*

Scotland, Ireland, and the Newcastle District of England: ROBERT H. HAY & CO., 2, ST. ANDREW SQUARE, EDINBURGH.
England (except Newcastle District): ... ... BECKER & CO., 64, CANNON STREET, LONDON, E.C.

Digitized by Google

National Union of Paper Mill Workers.

CUP & MEDALS COMPETITION.

Tea Party, Concert and Dance at Feniscowles.

To celebrate the winning of the cup and gold medals by the Star Paper Mill team a very successful gathering was held at Feniscowles Hall on Saturday, the 20th ult., when over 200 sat down to tea.

Mr. J. E. JEPSON, secretary and manager of the Star Paper Mill (who presided), in presenting the cup and medals to the winners, said he was proud, and they all were, of the team that had so ably won the cup in the first year of the competition, and he hoped that "Star" team would be inscribed on a few more shields on the pedestal of the cup as winners in future years. He thought it was an excellent thing on the part of Mr. F. Marshall, of Bolton, to have given the cup to the Union for yearly competition, and he was glad the Union had organised the competition so successfully, as he felt sure the meeting of the various mill teams in friendly rivalry was beneficial to all. Mr. Jepson hoped that every player would put the same energy and determination to succeed into their daily occupations, and if they did so they ought to rise to good positions in the paper trade world. It was only by each and everyone honestly doing their very best that success could be attained either in sport or in the daily battle of life. Mr. Jepson also presented a gold medal to Mr. J. W. Whitehead, of Bolton, which had been awarded to him by the Competition Committee for services during the competition. He then announced that Mr. Wm. Ross, general secretary, and Mr. Wm. Haworth, president of the Union, were with them, and he hoped that all would listen and profit by the few remarks they would make.

Mr. ROSS said he thought he would be expressing the opinion of all present in stating that they felt it a very great honour to have Mr. Jepson with them as chairman on such a memorable occasion. It was all the more gratifying to have him present, as a few of the employers in their trade had ventured to assert that there was too much attention being given by workmen to football, etc., and not enough to the work they had to do. He thought such remarks came with very bad grace from employers who worked their men till 12 p.m. every Saturday. Paper Mill workers were justly entitled to some healthy recreation on Saturday afternoons after the close confinement and arduous duties of the week, and were all the better fitted to resume work on Mondays when they had their liberty on Saturday afternoons. As the "National Union" had all along unaided endeavoured to secure and maintain a general Saturday afternoon holiday and no Sunday night work, he hoped everyone there would lend their support and help to strengthen its membership.

Mr. W. HAWORTH next spoke, and said he thought the winners of the cup fully deserved their victory, and was sure they would long cherish the handsome gold medals they had just received. He trusted they would never forget that it was owing to the Union that such a competition was possible, as without their combination they could never be sure of their liberties on Saturday afternoons; and he urged them all to seriously consider it their duty to themselves and to their employers to be in the Union, because it was a protection to just employers against unfair ones.

Mr. B. LING, secretary of the "Star" team, replied, and expressed, in a few well chosen remarks, the thanks of the team to Mr. Marshall for giving the cup, and to Mr. Jepson for kindly presenting it and the medals, which they would always esteem very highly. They hoped to put as good or a better team into the field next season, and thought their opponents would continue to find them a hard nut to crack.

A hearty vote of thanks was accorded to Mr. Jepson for presiding, and the remainder of the evening was devoted to a capital programme of singing and dancing.

Supper and Social at Glossop.

In connection with the same competition a supper and social was held on Saturday evening last, in the Surrey Arms Hotel, Glossop, which was very well attended. Letters of apology for inability to be present and present the medals won by Turnlee Paper Mill team were received from Councillor Herbert Partington and Mr. E. W. Allen.

Mr. WILDE, President of the Glossop Branch, presented the medals (won as runners-up in the final) to the Turnlee team, and expressed the pleasure he felt that their team had done so well the first year, and was sure they would make a determined effort next time to do better still and secure the cup.

Mr. MELLOR, Vice-president of the Union, also spoke and congratulated the team on their highly creditable performance. He thought the winning of such handsome gold-centred silver medals would act as a stimulus to them to try even harder next season to maintain an unbeaten record and win the cup.

Mr. MOON suitably replied for the team.

An audited balance sheet of the Competition Finances has been issued by Mr. W. Ross, hon. sec., which shows that after clearing all expenses the sum of £9 remained, which was devoted to paying for the medals to winners and losers in the final.

AMERICAN WALL PAPER CO., BOGOTA, NEW JERSEY.—Capital stock, 250,000 dols. Incorporators, Messrs. A. S. Matheson, A. M. Matheson and W. N. Smith. The company will manufacture wall paper and paper boards.

Digitized by Google

SPECIAL PREPAID ADVERTISEMENTS

IT IS IMPORTANT that Advertisements under any of the Headings mentioned below should reach us by the first post on Thursday to insure insertion the following day.

SITUATIONS WANTED—Charges for advertisements under this heading are One Shilling for twenty-four words, and One Penny per word after. Minimum charge One Shilling. Three Insertions are given for the price of two. Cash to be sent with Order.

SITUATIONS VACANT, BUSINESSES WANTED or FOR DISPOSAL, MILLS WANTED or TO LET, MACHINERY, and MISCELLANEOUS—Charges for Advertisements of the above class are Three Shillings for fifty words or under; One Shilling extra for every line or portion after. Ten words to be reckoned for each line

LEGAL & FINANCIAL ANNOUNCEMENTS, TENDERS SALES BY AUCTION, &c—One Shilling per line.

ADVERTISERS, by paying an extra fee of Sixpence, can have the replies addressed to the WORLD'S PAPER TRADE REVIEW Office under a number, and such replies will then be forwarded post free.

PAYMENTS must be made in advance, except where the advertiser has a running account, in which case the cost, can be debited thereto.

CHEQUES and Post Office Orders to be Crossed and made payable to W. JOHN STONHILL & CO.

OFFICES—58, SHOE LANE, LONDON, E.C

Situations Vacant.

MILLWRIGHT, used to Paper Mill Work, Wanted; one accustomed to Fitting and Turning preferred; must be steady and of good character.—Apply by letter, stating age, salary, and experience, to Farncombe Paper Co., Farncombe, Surrey. 9398

Situations Wanted.

PAPER MILL PLUMBER.—Advertiser seeks Situation; well up in all classes of work, including electrical; references.—Address, No. 9,397, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9397

PRACTICAL FOREMAN seeks Situation; experienced in Ropes, Shops, all classes of Browns; at present in small mill.—Address, No. 9,386, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, E.C. 9386

THOROUGHLY experienced Papermaker wants Situation as Foreman; used to Browns, Casings, Printings in all shades; A1 in Colours; highest references if required.—Address, No. 9,344, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9344

WANTED, Re-engagement as Manager, or any Position of Trust, by thoroughly practical man; experienced in all High-class Papers (Machine and Loft-dried), Blottings, Fine Printings, etc.—Address, No. 9,399, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9399

WANTED, Situation as Beaterman or Finisher; steady and experienced.—Address, No. 9,389, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9389

WANTED, Situation as Foreman; experienced in Printings, News, Colours, Blottings, I.V. Parchments, and Drawing Cartridges.—Address, James Yates, High-street, Bathford, Bath. 9372

YOUNG MAN, 26, seeks Situation as Machineman or Dryerman; used to Browns, Casings, or M.G. Machine; references if required.—Address, No. 9,393, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9393

YOUNG MECHANIC seeks Situation: well up in Paper Mill Work; good references.—Address, No 9,385, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9385

Machinery.

FOR SALE, Several Second-hand Dandy Rolls, equal to New.—For full particulars and sizes, write to T. J. MARSHALL & Co., Campbell Works, Stoke Newington, London, N.

Also Several Second-hand Red Rubber Deckle Straps.

If you WANT A DANDY ROLL QUICKLY, Telegraph: "DANDYROLLS, LONDON."

Telephone Number: 79 "Dalston." 6288

WANTED, a second-hand Millboard Roller Mill; rollers 3 feet long; in first-class condition.—Apply, with full particulars, to Psychiloid, Limited, Insulating Works, Love-street, Sheffield. 9391

Miscellaneous.

EXCELLENT SITES for Engineering, Paper, Textile, or other Works, for Sale, in lots to suit applicants, adjacent to the Motherwell Generating Station of the Clyde Valley Electrical Power Company.—Apply to Wright, Johnston, and Mackenzie, 150, St. Vincent-street, Glasgow. 9375

JOHN FULTON & CO., Engravers of Rollers for Printing Wall Papers, etc.; also of Rollers for Embossing all kinds of Paper.—Knowsley Street Engraving Works, Manchester.

VAST SAVING IN FUEL AND LABOUR.

More Steam. Quicker Supply. Less Wear and Tear.

Cost repaid many times every year. The

MOST DURABLE & MOST PROFITABLE in Use.

Sole Makers

SUTCLIFFE BROS., Albert Works, Godley, near Manchester.

1902 EDITION.

A Stämpelbok,

Or Book of the Trade Marks of the Chemical and Mechanical Wood Pulp Mills in Sweden and Norway.

Compiled by Mr. K. VON HOFSTEN, Gothenburg, Secretary to the Association of Scandinavian Pulp Makers (Swedish Section).

This Book not only contains the Shipping Marks of each Mill, but gives also full particulars about their Names, Owners, and Production; it should therefore prove a Most Useful Guide to anyone connected with the Pulp Industry in Scandinavia.

In One Volume, in the ENGLISH LANGUAGE, 21/- net, post free

SOLE AGENTS FOR THE U.K.

W. JOHN STONHILL & CO., 58, Shoe Lane, LONDON, E.C.

Digitized by Google

Established 1830

H. JACKSON & SONS,

Paper Stock Merchants,

FOUNTAIN STREET

BOLTON.

Telegrams—"FLAX, BOLTON."
Telephone No. 609

VARCOE AND SONS,

STOKE-ON-TRENT,

CHINA CLAYS

For PAPER-MAKERS.

ATTENTION

is respectfully invited from all Manufacturers to our

NEW SYSTEM OF LUBRICATING BEARINGS.

Those contemplating a change in their Bearings or Building New Works, should CONSULT US before deciding, as we have the

MOST UP-TO-DATE SYSTEM IN EXISTENCE.

The numerous attempted imitations prove its Excellence.

Address:—

DIAMOND LUBRICATING Co., LTD.,

94, Market Street,

Telephone [illegible]. MANCHESTER.

The World's Paper Trade Review

WEEKLY JOURNAL FOR PAPER MAKERS & ENGINEERS

ESTABLISHED 1872.

No. 1216 Old Series
No. 1160 New Weekly Series.

THE LEADING JOURNAL

For the British Paper & Pulp Industries.

Printed and Published EVERY FRIDAY by W. JOHN STONHILL & CO., at 58, Shoe Lane, London, E.C.

Subscription: £1 per Annum, post free to any part of the world.

REPRESENTATIVE FOR THE LANCASHIRE, YORKSHIRE, AND MIDLAND DISTRICTS:
MR. THOMAS FOSTER,
4, BOWKER STREET,
HIGHER BROUGHTON, MANCHESTER

FRIDAY, APRIL 1, 1904.

PRINCIPAL CONTENTS.

	PAGE
The Circulation of Stuff Water	1
Egyptian Demand for Paper	4
British Exports and Imports of Paper	6
Cuban Tariff	7
Paper for Decalcomania	10
Canadian Notes	10
French-American Trade	10
"Celluloid" from Casein and Nitro-Cellulose	12
Sweden's New Forestry Laws	12
United Alkali Co., Ltd	14
Hemp Stalks	15
New British Patents	15
Trade Notes	16
National Union of Paper Mill Workers	18
Leaderettes	20
Stocks and Shares	22
Wood Pulp Industry	25
Beating Engines	26
Our Foreign Post	27
Market Reports	28
A Useful Catalogue	28
American Imports of Paper, Paper Stock, Chemicals, Etc.	30
British Imports of Chemical and Mechanical Wood Pulp...	32
Current Prices of Papermaking Materials	34
General Notes	38
Abridged Patent Specifications	40

FOR LIST OF ADVERTISERS
See Page 23.

The American "Paper Trust."

THE American Newspaper Publishers' Association have taken a practical step against the so-called "paper trust." In the House of Representatives at Washington, D.C.,

Digitized by Google

Mr. Lilley, of Connecticut, introduced the following resolution, which went to the Committee on Judiciary:—"That the Secretary of Commerce and Labour be and he is hereby requested to investigate the cause of the present price of white paper used for the printing of newspapers in the United States, and the great scarcity of the same, and whether the said conditions have resulted in whole or in part from any contract, combination, in the form of trust or otherwise, or conspiracy, in restraint of commerce among the several States and territories or with foreign countries. Also, whether the said prices have been controlled, in whole or in part, by any corporation, joint stock company, or combination engaged in commerce among the several States or with foreign countries, and if so, to investigate the organisation, capitalisation, profits, conduct, and management of the business of such corporations, companies, and corporate combinations, and to furnish the House, at his earliest convenience, the results of the investigations herein requested."

* * *

The Effect of Preferential Tariffs.

Although the paper trade of this country has not, apparently, benefited so largely as other industries, yet it is very evident from official statistics that the preferential tariff given by the Canadians on imported British manufactures has caused a considerable expansion in the general export trade of this country to Canada. With preferences on the part of Australia and New Zealand, there is every reason to believe that the British papermaker will greatly benefit, as the requirements of these particular markets are not, to any extent, met locally as is largely the case with Canada. An advice from Melbourne states that Premier Deakin recently announced in the House of Representatives that the Federal Government was prepared to alter the tariff in favour of Great Britain, making sacrifices, if necessary, to secure reciprocal preferences. In no quarter has American competition been so severely felt by British paper exporters, particularly in "news," as in Australia, and with an alteration of the tariff in favour of Great Britain there can be no doubt that the Americans would be seriously affected. In fact, it is admitted by New York exporters that the imposition of of a duty of say 20 per cent. on printing paper would shut out American paper from the Australian market. Already American shippers, who formerly cultivated an export trade to New Zealand, complain that their business has fallen off materially. The Williamette Pulp and Paper Co., of Oregon City, Oregon, state that the difference of 20 per cent. in the duty has made it impossible for them to compete. They have been compelled to discontinue taking orders from former customers in New Zealand, and as a consequence they have found it necessary to discharge some of their work-people. The question of reciprocal preferences is evidently not lost on the foreigner who, perhaps, as time goes on, will show less disposition to ignore the country that buys so largely of his products. For instance, a suggestion is made by the manager of a Swedish paper mill that it may be beneficial for Sweden to buy from England instead of so largely from Germany. The latter country, it is pointed out, owing to a revised tariff, has practically precluded the importation of Swedish goods. Great Britain is Sweden's most important buyer of wood pulp, paper, boards, etc., and statistics show that in the matter of Sweden's imports Germany overlaps England considerably. Considering the importance of the Scandinavian pulp and paper industry, our engineers, chemical manufacturers, felt manufacturers, and mill furnishers generally should find a good market in both Norway and Sweden, especially if the feeling of reciprocity is cultivated. The *Svensk Pappers-Tidning*, in supporting the suggestion of a Swedish paper mill manager for closer commercial relations between the two countries (especially as protection is being advocated in the United Kingdom), says:—"It is a right principle to buy chiefly from those to whom one is allowed to sell, as far as this can be done without damage to one's own interest. This applies not only to individuals, but also to nations, and should be remembered not only in private life, but also in making commercial treaties. It is desirable that those interested should express themselves on this question so that it should be discussed from different points of view."

* * *

British Commercial Travellers.

A Parliamentary Paper of some importance, for reference purposes, to the commercial community has been issued. It is entitled "Memorandum Summarising the Regulations in force in Foreign Countries with regard to British Commercial Travellers," and in the case of each foreign country gives particulars of the licences required, if any, the cost of them, and the condition under which British commercial travelle

Digitized by Google

may pursue their calling. The memorandum has been compiled with the object of showing in a summary form the regulations which exist in the principal foreign countries governing the operations of British commercial travellers, to what special taxes commercial travellers are liable, and what Customs treatment is accorded to samples brought by travellers. In compiling the information, the Return issued by the Foreign Office in 1897 was taken as a basis, and particulars revising and supplementing that Return were collected in the Commercial Intelligence Branch of the Board of Trade, and submitted by the Foreign Office to his Majesty's representatives abroad for confirmation or correction. From the information thus collected and revised the present summary has been prepared. Particulars in regard to the treatment in the United Kingdom of foreign commercial travellers and their samples are added in an appendix. It may be pointed out that particulars respecting the regulations in force in India and the Colonies with regard to commercial travellers, similar to those contained in the present Return with respect to foreign countries, are contained in a Parliamentary Paper issued in 1900, and numbered Cd. 423.

GAZETTE.

ENGLAND and WALES.

PARTNERSHIPS DISSOLVED.

VOILE, ROBERSON, AND STEED, printers, stationers, booksellers, and dealers in fancy goods, Dover. Dissolved December 31st, 1903, as regards H. P. Steed, who retired. Debts by W. Voile and S. A. Roberson, who will continue the business under the syle of Voile and Roberson.

FILMER BROS. AND HOLMES, box and pattern-card makers, 158, Whitecross-street, London, E.C. March 18th.

DISTRIBUTION OF ASSETS.

IN THE MATTER OF A DEED OF ASSIGNMENT for the benefit of creditors, dated January 26th, 1904, and executed by H. L. Aldom, 8A, City-road, London, E.C., wholesale stationer and printer, trading as H. L. Aldom and Co. Claims by April 7th to the trustee, A. Willmott, C.A., 14, Old Jewry chambers, E.C.

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDER.

M'MULLON, T., lately trading as Fleming and Co.'s stationer and printer, 37, Wool Exchange, London, E.C. Date of order and of adjudication order, March 21st, made on debtor's own petition.

NOTICES OF INTENDED DIVIDENDS.

ALLEN, R. H., trading as Alien, Godfrey and Co., 8 and 9, Gray's-inn-passage, Red Lion-street, London, W.C., printer and advertising contractor. Claims by April 9th to G. White, C.A., 14, Old Jewry-chambers, E.C.

THOMPSON, H. L., 24, Montpelier-parade, Harrogate, Yorks., stationer and newsagent. Claims by April 6th to D. S. Mackay, official receiver, the Red House, Duncombe-place, York.

NOTICES OF DIVIDENDS.

[E]N, H., trading as L. Moll, Eugen and Co., and the Imperial Ink Co., 10[illegible], Fore street, and 67, [illegible]lane, London, E.C., agent and manufacturer. [illegible]nd final dividend of 3¾d., March 28th, at the offices [illegible]. Child and Son, C.A., 42, Poultry, E.C.

Stocks and Shares.

The following report is supplied by Mr. F. D. Dean, stock and share broker, 36, Corporation-street, Manchester. (Telegrams: "Fredean, Manchester;" 'Phone, No. 2180).

PAPER, &c.

Amount Paid.	Nominal Amount.	Name of Company.	Dividend last half-year.	Prices Mar. 29.
			%	
1	1	Annandale & Son ord.	10	24/6—25/6
5	5	do. do. pref.	5	5⅛—5⅜
100	100	Bergvik Co., 4½% debs. Nos. 1—3,000	4½	99—100
10	10	do. do. deferred	16	12¼—13⅜
10	10	do. do. 6% cum. pref.	6	10¾—11¼
4	5	Burnley Paper Co.	12½	7⅜—7⅝
7	7	Bury Paper, ord.	nil	6⅛—7⅛
7	7	do. 6% pref.	nil	7—7⅛
5	5	Darwen Paper Mill Co. "A"	10	10¼—10⅜
3⅛	5	do. do. "B"	10	7⅛—8
1	1	do. "C" issued at £1 pm.	10	2—2⅛
10	10	E. Lancashire Paper Co.	10	14½—15
10	10	do. do. 6% pref.	10	14¼—15
5	5	do. do. bonus	5	4⅛—4¼
3	5	Kellner-Partington Co.	15	9—9¼
5	5	do. do.	15	16—16½
100	100	do. do. debs. (red. 1914)	4½	102—104
5	5	N. of Ireland Paper Co.	10	6½—7⅛
5	5	Olive & Partington 5% pref.	5	5⅜—5⅝
7	10	Olive Brothers	nil	5¼—6
10	10	do. do. fully paid	nil	8—9
5	3	do. do. pref.	10	3½—4
1	1	Owen, T. & Co. 6% pref.	6	17/0—18/0
100	100	do. do. debs.	5	94—96
5	5	Peebles (A. M.) & Son	4	3⅜—3⅝
5	5	do. 5% cum. pref.	5	4—4⅛
100	Stock	do. 4½% deb.	4½	96—100
3	5	Ramsbottom Paper Co.	10	5⅜—5⅝
1	1	do. do. cum. pref	5	21/0—22/0
4½	5	Roach Bridge Paper Co.	10	3⅜—6¼
5	5	Star Paper Co.	10	8—8½
3	5	do. do. cum. pref.	10	6—6½
100	100	do. do. deb. stock	4½	99—100
10	10	Spicer Brothers cum. pref.	5	9⅝—10
10	10	Waterlow & Sons non.-cum. def.	12½	19½—20½
		do. do. non.-cum pref.	4	13—13⅜
10	10	do. do. cum. pref.	3½	8⅛—8⅜

CHEMICALS, &c.

1	1	Brunner, Mond & Co.	30	4⅞—4⅞
10/	1	do. do. "New"	30	2⅛—2⅛
10	10	do. do. 7% cum. pref.	7	16⅛—16⅜
1	1	Castner-Kellner Alkali Co.	nil*	14 0—14 6
100	Stock	do. do. 4½% deb.	4½	90—92
5	5	Clayton Aniline ord.	5	2⅞—3⅛
5	5	do. do. cum. pref.	nil*	4—4⅛
1	1	Electrolytic Alkali ord.	nil	4/6—5/0
1	1	do. do. 7% pref.	nil	11/0—12/0
5	5	Langdale's Chemical Co. Ld	2½	25/6—26/6
9	10	Lawes Chemical ord.	4½ †	3¼—3⅜
10	10	do. do. pref.	7	9¼—10
4	4	Salt Union ord.	nil	12.0—12,6
6	6	do. 7% non.cum. pref.	6/-	3⅞—4
100	Stock	do. 1st mort. deb.	4½	85½—85½
100	,,	do. "B" mort. deb.	4½	80 82
10	10	Steiner (F.) & Co. ord.	•nil	6—7
10	10	do. do. cum. pref.	5	7⅛—8
100	Stock	do. do. deb. stock (red. 1912).	4	84½—85½
10	10	United Alkali Co.	nil	20/9—21/3
10	10	do. do. cum. pref.	7	7⅛—7⅛
100	Stock	do. mort. deb. (red. after 1901)	5	97⅛—98½
1	1	United Indigo & Chemical	nil	2/6—3/0
1	1	do. do. 6% cum. pref	16	6/6—7/0

• Interim † For year. ‡ Div. to 31/12/02.

Digitized by Google

LIST OF ADVERTISERS.

Where number of page is omitted the advertisement does not appear in this issue.

Alkali, Etc. PAGE
Brunner, Mond & Co., Ltd. ... ...
United Alkali Co., Ltd. ... ...

Analysts, Experts, Engineers, &c.
Ekman, C. D. 37
Hurst, George H. 39
Salmon, W. H. 37
Sindall, R. W. 37

Belting, etc.
Sutcliffe Bros. ... ...

Boiler Coverings and Composition.
Emmett, James, Ltd. 37
Sutcliffe Bros. 19

Chemicals.
Bramwell, E., & Son ... ...
Brunner, Mond & Co., Ltd. ... ...
Pochin, H. D., & Co., Ltd. ... ...
Spence, Peter & Sons, Ltd. ... ...
United Alkali Co., Ltd. ... ...

Colours.
Cardwell, J. L., & Co. 39
Cornbrook Chemical Co. 37
Hinshelwood, Thos., & Co. 39
Levinstein, Ltd. 39
Manchester Aniline Co. 29
Pochin, H. D., & Co., Ltd. ... ...
Via Gellia Colour Co. 33

Dandy Rolls.
Green, W., & Son ... ... *Cover i.*
Marshall, T. J., & Co. 19

Economisers (Fuel).
Green, E., & Son, Ltd. ... ...

Electrical Plant.
Jackson, P. R., & Co., Ltd. 7

Engines (Steam).
Milne, James, & Son, Ltd., ... 11

Esparto Pulp.
Grondal, A. L. 31

Felts and Jackets (Papermakers').
Huyck, F. C., & Sons ... ...
Kenyon, James, & Son 29
Porritt, Joseph, & Son ... ...
Whitehead, R. R., & Bros., Ltd. 31

Minerals, Etc.
Belvoir and Newark Plaster Co. 39
Best, James, and Sons 39
Birch, W. Singleton, & Son, Ltd. 39
Bodelva and Lantern China Clay Works 39
Cafferata & Co. 39
China Clay Co. 39
Howe, John, & Co. 39
Lassale, Th. 39
Pochin, H. D., & Co., Ltd. ... ...
Rogers, J., & Co. 39
Satinite Co. ... ...
Varcoe & Sons 20
Winser & Co. 39

Miscellaneous.
Directory 39
Machinery for Sale and Wanted 19
Paper Mill Directory 15
Situations Vacant and Wanted 19

Oils and Lubricants.
Diamond Oil Co., Ltd. 20
Sutcliffe Bros. ... ...

Office and Library Furnishers.
Simpole's 29

Paper and Pulp Making Machinery.
Bentley & Jackson, Ltd. ... ... 8—9
Bertram, James, & Son, Ltd. ... ... *Cover iii.*
Bertrams Ltd. ... ...
Dietrich, Robert 13

Paper & Pulpmaking Machinery— *(Continued)*
PAGE
Fillner, H. ... ... *Cover iv.*
Lechla, O. ... ... *Cover iv.*
Marx, J., & Co. 33
Masson, Scott & Co., Ltd. ... ...
Milne, James, & Son, Ltd. 11
Voith, J. M. 33
Walmsley, Chas., & Co., Ltd. 5
Wandel, Chr. ... ...
West End Engine Works ... ...
Wurster, Dr. C. 29
Wyss, Escher, & Co. 36

Paper Bag Machinery.
Bumsted & Chandler ... ...

Paper Stock.
Beaumont, J., & Co. 37
Bradford, John S., & Co. ... ...
Caldwell, J., & Sons 37
Chalmers, E., & Co., Ltd. 17
Freese, Jean ... ...
Goodhind, R. & J. 37
Hay, R. H., & Co. ... ...
Hough, R. ... ...
Hyman Bros. 1
Jackson, Michael 20

Roll and Plate Engravers, etc.
Fulton, John, & Co. 19

Sizing.
Grove Chemical Co., Ltd. 39

Strawboard Centres.
Boyd, Hart & Co. 39

Straw Pulp.
Grondal, A. L. 31
Vereinigte Strohstoff-Fabriken 17

Tools (Papermakers').
Makin, William, & Sons 17

Typewriters.
Remington Typewriter 31

Ventilators, Etc.
Sutcliff Ventilating and Drying Co. 39

Water Supplies.
Abundant Water Supply Co. 39
Isler, C., & Co. 39
Le Grand & Sutcliff 37
Thom, John D. ... ... *Cover ii.*

Wood Pulp.
Actiengesellschaft für Maschinenpapier-Fabrikation ... 17
Alsing & Co., Ltd. 39
Andrews & Co., Ltd. ... ... *Cover i.*
Berner & Nielson ... ...
Forsmarks Cellulose Fabrik ... ...
Grant, W., & Co. 39
Grondal, A. L. 31
Hay, R. H., & Co. ... ...
Henderson, Craig & Co., Ltd. ... ...
Johnsen, Jorgensen and Wettre ... ...
Katfos Cellulosefabrik ... ...
Kommanditbolaget C. Fr. Waern & Co. 37
Lovenskiold-Fossum 27
Makin & Bancroft 15
Munds, Wilh. 37
Olrog, Thv. ... ...
Skotselv Cellulosefabrik ... ...
Storviks Sulfit Aktiebolag ... ...
Taylor, F. D., & Co. ... ...
Taylor, W. G., & Co., Ltd. ... ...
Tilsit Zellstoff Fabrik ... ...
Wertheim, A., & Co. 24
Wood, Harry B. 17

THE SAMPLING OF WOOD PULP.

A Practical Treatise,

By R. W. SINDALL.

8vo, Illustrated with Diagrams.

PRICE:—TWO SHILLINGS.

To be had of W. JOHN STONHILL & CO.,
58, Shoe Lane, London, E.C.

Digitized by Google

A. WERTHEIM & Co.,

HAMBURG,

SUPPLY ALL KINDS OF

Sulphite,

Soda and

Mechanical

WOOD PULPS.

OFFICES AT:

[illegible] Norway	[illegible] No. [illegible]
[illegible] Sweden ..	Lilla [illegible] No. [illegible]
[illegible] .	[illegible] Buildings opposite Exchange.
[illegible] ..	[illegible] Queen Victoria Street E.C.
[illegible] . .	[illegible] No. [illegible]
[illegible] .	[illegible]
[illegible] .	[illegible]
[illegible] .	[illegible]
[illegible] . ..	[illegible] No. [illegible] Qu. [illegible]
[illegible] . ..	[illegible] Street.

[illegible]

"WERTHEIM, HAMBURG."

Digitized by Google

THE WORLD'S
Wood Pulp Industry

A Weekly Record of the Latest Information of Interest to Manufacturers of Chemical and Mechanical Wood Pulps, Agents, Buyers, and Others.

LONDON: 68, SHOE LANE, E.C.

Week's British Imports.

THE receipts of wood pulp at British ports during the week ended March 19th were as follows from the countries mentioned:—

CHEMICAL—DRY.		
Sweden	1,468 tons	£11,507
Norway	779 ,,	6,123
Prussia	100 ,,	910
Russia	60 ,,	470
Holland	50 ,,	450
Denmark... ...	30 ,,	240
Austria	10 ,,	70
France	10 ,,	105
Finland	10 ,,	68
CHEMICAL—WET.		
Norway	265 tons	£1,075
MECHANICAL—WET.		
Norway	6,435 tons	£15,124
Sweden	140 ,,	280

Billerud and Slottsbron Sulphite Factories, Sweden.

IN our last issue we mentioned that a syndicate had acquired the majority of shares in the Billerud and Slottsbron Companies. This information is confirmed by the *Goteborgs Aftonblad*, and the announcement is made that Mr. Lindstedt will seek retirement. The transaction is regarded as of the utmost importance. Billerud, the older of the two factories, was founded early in 1880 by Messrs. Folin and G. T. Lindstedt. The latter was at that time manager of the company, and Mr. Folin the engineer. Mr. Folin shortly afterwards identified himself with the establishment of the Storviks Sulphite Aktiebolag. Mr. Lindstedt, encouraged by the good results obtained at Billerud, took a leading part in forming the Slottsbrons Sulphite Aktiebolag. Both works have an annual production of some 20,000 tons of pulp. The share capital of the Billeruds Aktiebolag is 800,000 kronor, and that of the Slottsbrons Sulphite Aktiebolag 600,000 kronor. The majority of the shares, which stand considerably above par, has been taken up by a syndicate in Gothenburg, the transaction being arranged by the Gothenburg Bank Aktiebolag. Mr. James G. Calvert, engineer, has been appointed manager of both works, and the firm of Messrs. J. A. Kjellberg and Son, in Gothenburg, will undertake the sale of the mills' production. We are informed that the rumours as to the establishment of a paper mill are without foundation.

Swedish Forests.

MR. C. E. SONTUM, of Christiania, reports:—One of the largest forest owners of this country recently gave it as his opinion that the Swedish forests would not be able to constantly yield so large quantities of wood as in recent years. His main reason for this belief was, that the forests of very big trees, when cut, did not contain any undergrowth of small trees. In the long run these forests would yield more wood in cubic measurement until the big trees were taken out, but for a long period after that they could yield nothing.

No Export Duty on Austrian Pulp Wood.

THE Austrian Government has refused to grant an export duty on raw wood, which has lately been strongly urged by Austrian pulp makers.

United States.

REPORTS from New York state that the mechanical wood pulp market is easier. Mills that were affected by low water are now running full time or nearly so.

THE shipments of Scandinavian mechanical arrived at American ports upon the break-up of winter and streams full enough to enable mills to work.

Digitized by Google

American chemical pulps are firm in price, notwithstanding that the increased production of mechanical has lessened to some extent the consumption of sulphite.

American Imports and Exports.

The imports of wood pulp into the United States during January last were from the following countries:

	Tons	Dollars
B. N. America	6,680	168,998
Germany	907	30,322
Other European countries	1,877	81,920
Total ...	8,924	230,241

The total for the corresponding month of the previous year amounted to 10,406 tons of the value of 321,121 dols., comprising 6,288 tons from B. N. America of the value of 141,023 dols.; 1,811 tons from Germany, valued at 80,000 dols.; and 2,307 tons from other European countries, of the value of 97,092 dols.

During the seven months ended January last the United States imported wood pulp as follows:

	Tons	Dollars
B. N. America	60,704	1,050,768
Germany	5,552	252,350
Other European countries	17,097	727,904
Total ...	83,353	2,020,091

Compared with the corresponding seven months of the previous year (when the total amounted to 67,273 tons of the value of 1,888,570 dols.), an increase is shown in the quantity received from B. N. America to the extent of 12,807 tons, but the value shows a decline of 68,462 dols.; the receipts from Germany evidence a decrease of 5,052 tons and 38,188 dols.; while the supplies from other European countries show an increase of 6,225 tons and 218,160 dols.

The United States exported wood pulp during January last to the extent of 2,581,205 lbs. of the value of 50,214 dols., an increase compared with the corresponding month of 1903, when the quantity stood at 1,513,321 lbs. of the value of 32,357 dols. The seven months exports amounted to 20,970,711 lbs., valued at 462,917 dols., as against 14,823,747 lbs. valued at 289,985 dols. for the corresponding period in the previous year.

Timber Lands in the State of New York.

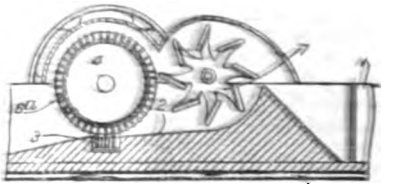
A fresh illustration of the fact that timber lands in the State of New York have greatly increased in value during the past few years is given by the Carthage, N.Y., Sulphite Company. In 1901 this company bought a few hundred acres of timber lands in Lewis County. Not long ago there was made for the entire tract an offer that would yield a profit of 70,000 dols. to those who bought it five years ago, and besides would leave them all the pulp timber on it, which in value would amount to nearly as much more.

Quebec's Pulp Wood.

Very strong representations have been made to the Quebec Government in favour of an export duty on all wood exported to the States, and it is anticipated that the Legislature will meet the popular demand in this respect. In regard to the English market, it is suggested that a preference should be given.

Beating Engines.

In this invention, which is by Messrs. Pope and Mullen, the backfall 2 is of the shape shown, and carries the bed 3, above which is a beater cylinder 4. The blades of the cylinder are of equal thickness throughout, are bound together by rings 6, and are separated by wedge-shaped blocks of wood, which extend nearly to the outer edges of the blades. The blades may be arranged in



groups, the several groups being separated by wood blocks of greater thickness than those which separate the blades of a group. Between the beater 4 and the summit of the back-fall is arranged a rotating propeller 7, which removes the treated pulp from the beater and lifts it over the backfall, thereby assisting the circulation of the pulp through the tub or receptacle 1.

The preparatory work for establishing closer fiscal relations between the three Scandinavian nations which has been carried on for some time past has now had its first visible results. According to the *Aftonbladet*, the Norwegian Department of the Association for the Promotion of Scandinavian Fiscal Union recently had its constituent meeting in Christiania. According to the statutes, the aim of the Association is to work for a complete and universal solution of the question of a more or less extended Scandinavian fiscal union, and, without expressing any views regarding Free Trade or protective duties, to examine the possibilities and the conditions for such a union, and also to spread the knowledge of its importance in as wide a degree as possible. A public invitation will be sent out to the three Scandinavian countries after some time, when the Swedish and the Danish departments have been constituted.

Advertise in this paper! It pays!!

Digitized by Google

SWEDEN.

IT is reported that a Stockholm engineer has succeeded in producing an artificial silk out of acetate of cellulose, free from the deficiencies which have marred the results of previous experiments. This new silk is as strong as natural silk, does not lose anything of its strength in water, is easily coloured, soluble only in a few substances, as chloroform, phenol, and nitro-benzole, and shows a marvellous power of resistance against electricity, surpassing even volcanised gum in this respect. The new artificial silk will, it is believed, be of enormous importance, especially for the Northern countries, where at present all experiments to produce artificial silk have been abandoned.

—o—

GERMANY.

A COMPANY has been formed to work the paper mills Kohlmuhle, near Schlandau, in Saxony, acquired by Messrs. Hoesch and Co. from the trustees of the bankrupt estate of the Sebnitzer Papierfabrik.

The LEIPZIG EXHIBITION.—In connection with the 24th official paper, etc., exhibition, instituted by the Central German Paper Industrial Union, a handy guide for the use of visitors has been issued. In addition to containing an alphabetical list of exhibitors, the various articles are classified with names of firms.

—o—

AUSTRO-HUNGARY.

THE Hermanetzer Papierfabrik in Hermanetz (now renamed Hermánd) recently celebrated its 75 years' jubilee. In a pamphlet published by Dr. Joseph Baudisch, it is stated that Franz Leicht, a bookseller in Neuschl, Hungary, erected in 1829 a paper mill, which after many vicissitudes, was acquired in 1866 by Stadler and Hüttner. Since 1899 Messrs. Heinrich and Bruno Hüttner have been the sole owners. The mill has its own wood pulp factories. The annual output is five million kilos. of fine and medium papers.

—o—

UNITED STATES.

PAPER ASSOCIATION OF NEW YORK CITY.—The second annual meeting of this Association was recently held, when the bye-laws were amended so as to admit paper dealers eligible for membership outside of New York city. Mr. May, the president, in his report, said they had succeeded in cutting quite a number of trade abuses. He referred to the satisfactory work of the Collection Bureau, which compelled delinquents to pay their just debts. The steps taken by the Association to remedy the evils arising from the brokers, and by direct competition by manufacturers led to the formation of the National Paper Trade Association of the United States.

A 104-INCH Fourdrinier machine was recently shipped from the States to a Japanese paper mill.

THE American Paper Company has recently been incorporated under the laws of the State of New Jersey with a nominal capital of 250,000 dols. A mill has been acquired at Bogota, N.J.

THE Kalamazoo Paper Box and Playing Card Company with a capital of 100,000 dols., has been formed for the purpose of manufacturing playing cards. The company is a development of the Kalamazoo Paper Box Company, of Kalamazoo, Mich.

BY-PRODUCTS PAPER CO.—It is reported from Nigara Falls, N.Y., that the plant of this company, which has been in operation about two months, is temporarily shut down with a view to reorganisation of the company. The plant produced pulp from flax straw.

TRADE MARK.

LÖVENSKIOLD-FOSSUM,
SKIEN, NORWAY.

EXPORTER OF
Moist Pine Pulp.

Sole Agents for England and Ireland:—
HANS DESSEN & CO.,
2, Great Winchester, Street, LONDON, E.C.

Sole Agents for Scotland:—
W. GRANT & CO.,
4a, St. Andrew Square, EDINBURGH.

Digitized by Google

MARKET REPORTS.

Telegrams—"STONHILL, LONDON."

Chemicals.

Fair demand. AMMONIA ALKALI, 58 per cent., stands at from £4 10s. to £4 15s. per ton on rails at works; BLEACHING POWDER (soft wood), £4 5s. to £4 10s.; CAUSTIC SODA, 76–77 per cent., £10 10s. to £10 15s.; SODA CRYSTALS, £2 17s. 6d. to £3 2s. 6d.; SALT CAKE, £1 17s. 6d. f.o.b. Liverpool; ALUM, £5 to £5 5s.; and RECOVERED SULPHUR, £5 5s. to £5 10s. SULPHATE OF ALUMINA and BLANC FIXIE steady at unchanged prices.

Chemical Wood Pulps.

A good enquiry is reported; prices are firm.

Mechanical Wood Pulps.

Business is still difficult to arrange, as the difference of opinion between buyers and sellers as to future prices is very great. Pulp manufacturers hold out for £2 5s. for Moist and £4 10s. for Dry, while papermakers' offers are several shillings below. The tendency, however, is still upwards for forward delivery.

Esparto.

The demand for summer and autumn shipment continues, although not quite so active as a few weeks ago. Earlier supplies are scarce, and firmly held for higher prices.

The arrivals of ESPARTO at British ports during last week were as follows:—1,125 tons from Almeria, to the order of Morris and Co., landed Granton; 1,210 bales from Gourine, landed Glasgow; 1,777 bales from Skira, landed Glasgow.

Straw Pulps.

The imports at British ports during the week ending Saturday last included 26 bales of Straw Pulp from Amsterdam to the order of J. Rankins and Son, and 126 bales, to the order of Henderson, Craig and Co., landed Grangemouth.

Home and Foreign Rags.

For HOME RAGS, with the exception of coloureds, a good demand is reported at unchanged prices.

The exports of PAPER STOCK during the week included shipments to Belgium, 146 tons; B. Guiana, 6 tons; France, 215 tons; Germany, 19 tons; Holland, 96 tons; India, 110 tons; S. Settlements, 30 tons; United States, 186 tons.

In FOREIGN RAGS, French and Belgian shipments are well maintained; German and Dutch packers report a quiet market.

The receipts of FOREIGN RAGS at British ports during last week were from the following countries:—Belgium, 1,731 bales; Brazil, bales; Channel Islands, 52 bales; Denmark, 78 bales; Finland, 71 bales; France, 1,547 bales; Germany, 226 bales; Holland, 593 bales; Norway, 60 bales; Prussia, 151 bales; Spain, 73 bales; Turkey, 53 bales; United States, 60 bales.

Sizing.

Trade steady: values unaltered.

Minerals, etc.

The market is very brisk, especially for the best grades of CHINA CLAY. FRENCH CHALK and MINERAL WHITE are in request, and there is a moderate amount of business passing in BARYTES, SATINITE, and BAUXITE.

A Useful Catalogue.

A well arranged catalogue has just been issued by Messrs. Fleming, Birkby and Goodall, Ltd., whose head works and registered offices are at West Grove Mill, Halifax. This old-established firm of manufacturers have achieved a high reputation for their leather and textile beltings, and in the paper trade their speciality, known as the "Teon" belt, has been found particularly suitable, it being guaranteed superior in certain respects to any other belts required to run in heat, steam, water and variable atmospheres. Messrs. Fleming, Birkby and Goodall, Ltd., also do a large business in rubber goods, etc. The opening pages of the catalogue contain views of the various works of the company, whilst interior views show a belt making room (one of five), leather drying room, leather store room, leather scouring department, leather setting room, etc. In looking after the furnishings of a mill, a catalogue of this kind, with a full general index, will be found of great service to the parties responsible. It is divided into thumb-opening sections; for instance section A deals with leather beltings, etc.; B, textile beltings, etc.; C, belt fasteners, etc.; D, hydraulic leathers, canvas, hose, etc.; E, packings; F, pulleys, etc.; G, card clothing, etc.; and H, hints, data, etc. The catalogue, which is well illustrated, gives a full description of the articles supplied by the firm, with sizes, prices, etc. The paper mill man will find a mass of useful information at the end of the book; we may mention examples of leather belt joints and results of tests and illustrations of belt drives, whilst a table shows the indicated h.p. transmitted by double leather belting, etc. Those of our readers interested desiring a copy of this new trade catalogue should write Messrs. Fleming, Birkby and Goodall, Ltd., West Grove Mill, Halifax.

AMERICAN PATENTS.—No. 754,036, suction box for papermaking machines, Edward C. Andrews, Penn Yan, N.Y.; No. 754,071, a pulp grinder, M. O. Kasson, Sandy Hill, N.Y., assignor to the Union Bag and Paper Co.; No. 753,904, machine for drying paper board, T. W. McFarland, Chicago; No. 754,161, horizontal pulp strainer, P. Reinicke, Cothen, Germany.

Digitized by Google

SIMPOLE'S,

Complete Office & Library Furnishers.

Roll Top Desks

Board Room Furniture

Clerks' Desks

Consulting Tables

Revolving Chairs

Expansion (UNIT SYSTEM) Bookcases

Card Index AND Letter Filing Cabinets.

Safes, &c.

ESTIMATES GIVEN.

INSPECTION INVITED.

Established 1844.

Telephone: No. 1847.

(Late Cathedral Steps), 36, DEANSGATE, MANCHESTER.

JAMES KENYON and SON,

DERBY STREET MILLS, BURY, LANCASHIRE.

ALL FELTS for Papermakers.

Telegrams: "KENYON, BURY."

DR. C. WURSTER'S PATENTED Pulping Engines & Kneaders

NEARLY 80 AT WORK.

LARGE PATTERN—THREE SIZES.

PULPING-UP 3, 6, and 9 TONS of Dry Papers or Pulp in 24 hours.
Power:—5-h.p., 8-h.p., and 12-h.p. Prices:—£125, £150, and £200.

SMALLER PATTERN—For Clean Papers only.

PULPING-UP HALF-A-TON to ONE TON of Dry Paper in 24 hours. 2 to 4-h.p.
Built in Iron, £75, £90, and £100.

For Better Quality Papers, Trough and Propellers made of Brass:—£100, £125, & £150.

Special Machines for Unsorted Paper.

These Machines do not grind, cut up, or wet the fibres, and, as the state of beating and refining is unaltered, neither colour nor sizing being affected, and impurities not touched, "Broke" can be re-used for the same quality of paper again.

For Particulars apply to **Dr. C. WURSTER,** 29, Abbey Road, St. John's Wood, LONDON, N.W.

Digitized by Google

AMERICAN IMPORTS OF

Paper, Paper Stock, Chemicals, &c.

The following is the latest weekly list, compiled from official returns, of American imports from the ports mentioned:—

Paper.

ANTWERP.—New York: 10 cases, W. Seyd; 35 cases, Kupfer Bros.; 1 case, P. C. Zulke; 115 cases, Dingelstedt and Co.; 1 case, Dejonge and Co.; 1 case, M. H. Kuhn; 21 cases, Sheldon and Co.; 20 cases, G. Gennert; 3 cases, Downing and Co.; 1 case, Dickerhoff, Ruffloer and Co.; 4 cases, J. W. Hampton; 1 case, L. C. Wagner; 1 case, Hein and Co.

BREMEN.—New York: 20 cases, Kupfer Bros.; 2 cases, Masse and Whitney; 3 cases, B. Russegger.

CENTRAL AMERICA.—New York: 21 cases, American Writing Paper Co.

GLASGOW.—New York: 10 cases, American Tobacco Co.; 27 cases, McLauren Bros.

HAMBURG.—New York: 100 cases, Dingelstedt and Co.; 8 cases, Stone and Co.; 2 cases, Lindenmeyr and Sons; 11 cases, Sheldon and Co.; 10 cases, Dejonge and Co.; 7 cases, Kehlman and Co.; 18 cases, American Tobacco Co.; 90 cases, A. Kraut; 9 cases, Zinkeissen and Co.; 6 cases, Knauth, Nachod and Kuhne.

HAVRE.—New York: 1 case, P. C. Zulke; 2 cases, McKesson and Robbins.

HULL.—New York: 2 cases, Wakum and McLoughlin.

LIVERPOOL.—New York: 65 cases, Hermann Lips; 55 cases, American Tobacco Co.

LONDON.—Boston: 1 bale, Potter Drug Co.; 1 case, B. D. Webber, 2 cases, Pitt and Scott.

Manillas.

ANTWERP.—New York: 555 bales, A. Kazenstein; 110 bales, Salomon Bros.; 140 bales, F. Salomon and Co.

HAMBURG.—New York: 182 bales, F. Salomon and Co.

HULL.—New York: 72 bales, Castle, Gottheil and Co.

LONDON.—Boston: 162 coils, 17 bales, Train, Smith and Co.

Rags.

ANTWERP.—New York: 283 bales, A. Kazenstein; 350 bales, Butterworth and Co.; 130 bales, F. Salomon and Co.; 351 bales, A. Salomon; 232 bales, Castle, Gottheil and Co.

BRISTOL.—New York: 442 bales, Train, Smith and Co.

CENTRAL AMERICA.—New York: 20 bales, C. Harley.

HAMBURG.—New York: 264 bales, Salo-; 10 bales, A. Kazenstein; 358 Salomon and Co. Boston; 337 non Bros.; 90 bales, F. Salomon bales, True and McClelland.

HULL.—New York: 306 bales, A. Salomon; 150 bales, Train, Smith and Co.; 60 bales, Butterworth and Co.

LIVERPOOL.—New York: 626 bales, Atterbury Bros. Boston: 76 bales Butterworth and Co.; 75 bales, Wolf and Son.

MANCHESTER.—Boston: 258 bales, Butterworth and Co.

Waste Paper.

GLASGOW.—New York: 203 bales, M. Gottestein.

HULL.—New York: 43 bales, Castle, Gottheil and Co.

LONDON.—New York: 97 bales, Lyon and Co. Boston: 49 bales, Wheelwright Paper Co.

Wood Pulp.

ANTWERP.—New York: 264 bales, 50 tons, R. Helwig.

COPENHAGEN.—New York: 840 bales, 110 tons, Lyon and Co.

HAMBURG.—New York: 829 bales, 183 tons, R. Helwig. Boston: 150 bales, S. Goldman; 1,000 bales, Aspergrain and Co.; 960 bales, Page, Newell and Co.

MANCHESTER.—Boston: 440 bales, Page, Newell and Co.

Bleaching Powder.

ANTWERP.—New York: 25 casks, F. A. Reichard.

HAMBURG.—New York: 50 drums, Rosslacher and Hasslacher.

LIVERPOOL.—New York: 250 casks, J. L. and D. S. Riker; Boston: 350 casks, J. L. and D. S. Riker.

Caustic Soda.

LIVERPOOL.—New York: 50 drums, Hill's Son and Co.

Soda Ash.

LIVERPOOL.—Boston: 19 casks, 480 bags, Linder and Meyer.

Sizing.

LIVERPOOL.—New York: 83 bales, Gardner and Bro. Boston: 100 bags, Crane and Co.; 143 bags, Butterworth and Co.

China Clay.

LIVERPOOL.—Boston: 683 casks, J Richardson; 210 casks, Salomon and Bro.

MANCHESTER.—Boston: 639 casks, J. Richardson.

Sulphur.

LIVERPOOL.—Boston: 734 bags, Linder and Meyer.

JOHN HOWE AND CO., LTD.—This company has been formed with a nominal capital of £33,000, in £10 shares, to acquire the business of a gypsum and cement manufacturer, mine and quarry owner and lessee, etc., carried on by B. C. Howe, E. W. Howe, and C. J. Howe, at Cocklakes, Witheral, Cumberland, as John Howe and Co. No initial public issue. Messrs. B. C. Howe, E. W. Howe and C. J. Howe are permanent governing directors; special qualification, £1,000; qualification of ordinary directors, £500.

Digitized by Google

A. L. GRÖNDAL,

PARIS: 3 rue Grammont

SUPPLIES ALL KINDS OF

WOOD PULPS

— CHEMICALS AND MECHANICALS —

OF ALL ORIGINS.

AMERICAN POPLAR SODA PULP.

STRAW
ESPARTO } PULPS.

. . PULP WOOD . .

Telegrams: "GRONDAL, PARIS."

Codes used ABC ZEBRA Own Code.

R. R. WHITEHEAD & BROS. LTD.,

TELEPHONE: 16 Mossley.

TELEGRAPHIC ADDRESS: "Whiteheads, Greenfield Yorkshire"

Royal George Mills,

GREENFIELD, NEAR OLDHAM.

MANUFACTURERS OF EVERY DESCRIPTION OF

FELTS

FOR PAPER AND PULP MILLS.

Remington Typewriter.

THE BUSINESS BUILDER.

(Write for Particulars).

100, GRACECHURCH STREET, LONDON, E.C
253, OXFORD STREET, LONDON, W.

Digitized by Google

BRITISH IMPORTS of CHEMICAL and MECHANICAL WOOD PULP

For the Week Ended March 19th, 1904.

SPECIALLY COMPILED FOR THE BRITISH WOOD PULP ASSOCIATION.

An Official Account of the Registered Quantities and Values of Chemical and Mechanical Wood Pulp imported at the various ports of the United Kingdom.

CHEMICAL—DRY.

Date.	Ports	Vessel.	Port whence.	Packages.	Quantity.	Value.	Importer.
1904					Tons.	£	
March 11	London ...	Pollux ..	Oddevalla ..	248 bales	31	275	Berner & Nielsen
" 10	" ...	Taurus ..	Trondhjem ...	800 "	100	795	Johnsen, Jorgensen & Wettre
" 10	" ...	Pollux ...	Oddevalla ...	160 "	20	150	" "
" 15	" ..	Thorsten ..	Gothenburg ...	340 "	50	400	Page Son & East
" 15	" ..	Hilma ...	Skien ...	10 "	2	16	Becker & Co.
" 16	" ..	Taurus ..	Trondhjem ...	160 "	20	160	Johnsen, Jorgensen & Wettre
" 16	" ..	Export ...	Rotterdam ...	250 "	50	450	Northfleet Paper Mills
" 16	" ..	Auricula ...	Dunkirk ...	256 rolls	10	105	G. Western Railway Co.
" 17	" ..	Milo ...	Norrkoping ...	180 bales	30	210	Andrews & Co.
" 17	" ...	Thule ..	Gothenburg ..	760 "	100	735	Alsing & Co.
" 14	" ..	" ..	" ..	320 "	40	300	" "
" 14	" ..	Christian IX. ...	Konigsberg ..	254 "	50	500	Becker & Co.
" 10	" ..	Yeddo ...	Revel ...	274 "	60	470	A. E Reed & Co.
" 10	" ..	Albert Edward	Gothenburg ..	280 "	40	320	Becker & Co.
" 10	" ..	Christian IX. ...	Konigsberg ...	280 "	50	410	Andrews & Co.
" 14	Grimsby ..	Adolf ...	Drammen ...	1,812 "	215	1 580	Becker & Co.
" 16	Hull ..	Ariosto ...	Gothenburg ...	400 "	50	350	Henderson, Craig & Co.
" 14	" ...	Tasso ...	Drontheim ...	80 "	10	70	T. Wilson, Son & Co.
" 15	" ...	Ariosto ..	Gothenburg ...	452 "	55	385	" "
" 10	" ...	Romeo ..	" ..	160 "	20	140	Henderson, Craig & Co.
" 10	" ...	" ..	" ..	80 "	10	70	Alsing & Co.
" 10	" ...	Volturno ...	Trieste ...	160 "	10	70	Becker & Co.
" 14	Manchester ..	Alice ...	Sannesund ...	140 "	17	170	Kellner-Partington Paper Pulp [Co.
" 16	" ...	Barbro ...	Tofte ...	800 "	100	800	Andrews & Co.
" 15	" ...	Ragnhild ...	Drammen	680 "	85	680	Berner & Nielsen
" 14	" ...	Ivy ..	Stockholm ..	1,600 "	200	1,655	W. G. Taylor & Co.
" 17	" ...	" ...	" ..	5,700 "	570	4,375	Henderson, Craig & Co.
" 15	Newcastle ...	Nord I. ...	Hango	60 "	10	68	Forwood Bros. & Co.
" 15	South Shields	Sterling ..	Laurvig	90 "	15	120	Becker & Co.
" 15	" ...	" ..	Christiania ..	80 "	10	80	P. H. Matthiessen & Co.
" 14	Aberdeen ...	Gladieness ..	Drammen ...	162 "	20	150	J. Cook & Son
" 14	" ...	" ..	" ...	200 "	25	212	Becker & Co.
" 10	Glasgow ..	Shuna ..	Gothenburg ..	1,164 "	148	1,184	Glen & Co.
" 14	" ..	Thelma ..	" ..	80 "	9	73	" "
" 12	" ..	Minerva ..	Oporto ..	800 "	50	350	J. & P. Hutchison
" 17	Grangemouth	Norway ..	Drammen ..	800 "	100	750	W. G. Taylor & Co.
" 17	" ..	" ..	" ..	200 "	25	225	J. T. Salvesen & Co.
" 17	" ..	" ..	Christiania ..	240 "	33	315	" "
" 14	Granton ..	Balder ..	Gothenburg ..	440 "	65	520	Chr. Salvesen & Co.
" 14	" ..	" ..	" ..	400 "	50	365	W. G. Taylor & Co.
" 14	Leith ..	Breslau ..	Copenhagen ..	240 "	30	240	J. Currie & Co.
" 15	" ..	Starbyhall ..	Oporto ..	450 "	42	273	T. Aitken

CHEMICAL WET.

Date.	Ports	Vessel.	Port whence.	Packages.	Quantity.	Value.	Importer.
1904					Tons.	£	
March 18	London ..	Ottawa ..	Skien ..	80 bales	10	85	Johnsen, Jorgensen & Wettre
" 18	Hull ..	Angela ..	Christiania ..	1,200 "	148	780	T. Wilson, Sons & Co.
" 18	Manchester ..	Bachhild ..	Drammen ..	480 "	60	340	Berner & Nielsen
" 18	South Shields	Sterling ..	Laurvig ..	480 "	60	400	P. H. Matthiessen & Co.

MECHANICAL WET.

Date.	Ports	Vessel.	Port whence.	Packages.	Quantity.	Value.	Importer.
1904					Tons.	£	
March 14	London ..	Ludwig ..	Drammen ..	200 bales	30	210	Becker & Co.
" 14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	"
" 16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	"
" 14	Hull ..	Mary Ann	Christiania ..	240 "	30	210	"
" 14	Manchester ..	[illegible]	[illegible]	1,600 "	200	1,400	A. W. Keyse & Co.
" 14	" ..	[illegible]	[illegible]	400 "	50	350	Johnsen, Jorgensen & Wettre
" 14	" ..	[illegible]	[illegible]	400 "	50	350	P. B. Wood
" 14	" ..	[illegible]	[illegible]	1,000 "	125	875	Kellner Partington Paper Pulp Co.
" 15	" ..	" ..	[illegible]	2,000 "	250	1,750	R. T. Stevenson & Co.
" 14	[illegible]	[illegible]	[illegible]	1,600 "	200	1,400	P. B. Wood
" 14	[illegible]	[illegible]	[illegible]	1,000 "	125	875	P. B. Wood
" 14	[illegible]	[illegible]	[illegible]	800 "	100	700	P. B. Wood & Co.
" 14	[illegible]	[illegible]	[illegible]	400 "	50	350	[illegible]
" 14	[illegible]	[illegible]	[illegible]	400 "	50	350	A. W. Keyse & Co.
" 14	[illegible]	[illegible]	[illegible]	400 "	50	350	R. T. Stevenson & Co.
" 14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Digitized by Google

Standard Shades. **COLOURS** Specially Prepared for Papermakers

Strong Rich Tints in Mineral Colours.

PERMANENT AGAINST LIGHT & HEAT.

WASHED GOLDEN OCHRES
STRONG ENGLISH OCHRES
STRONG ENGLISH UMBERS
PURE RED OXIDES.
MINERAL BLACK.

A Special Line TURKEY RED.

If not already buying from us, oblige by sending Post Card for line of Samples and Quotations.

VIA GELLIA COLOUR CO., Matlock-Bath.

Manchester Office: 22, EXCHANGE BUILDINGS, St. MARY'S GATE.

Telegrams:—"COLOURS, MATLOCK-BATH." "STEADY, MANCHESTER." Nat. Tel. No. 44, MATLOCK.

J. M. VOITH,

Papermakers' Engineer & Turbine Builder

HEIDENHEIM-on-BRENZ.

Every Description of Machinery

FOR PAPER AND PULP MILLS.

SPECIALITIES:

Paper Machines.
Board Machines.
Calenders.
Bischof's Reelers.
Angle Cutters.
Rag & Rope Engines.
Beating Engines.
Basalt Lava Beater Rolls.
Dr. Wurster's Pulping Engines.
Large Four-sided Cutters, with Mechanical Feed.
Nacke Refining Engines.
Strainers & Knotters.
Hydraulic Presses.
Packing Presses.
Stuff Pumps and Water Pumps.

TURBINES suitable for all Falls and Quantities of Water.
TURBINE GOVERNORS of utmost Precision.
1,502 TURBINES, with 244,882 h.p., in use and on order.

Sole Agents for the United Kingdom and Colonies:—

J. MARX & Co., 133—139, Finsbury Pavement E.C

Digitized by Google

Office of the WORLD'S PAPER TRADE REVIEW,

Telegrams: "STONHILL- LONDON." *58, Shoe Lane, London, E.C.*

CURRENT PRICES

OF

PAPERMAKING MATERIALS.

CHEMICALS.

Quotations are [illegible] as follows:

Alkali, Ammonia, 880	f. o. b. Liverpool		£4	10	0
,, ,, 880	,, ,,			4	5	0
Alum (Ground), Tierces	,, ,,	2½%		5	10	0
,, barrels	,, ,,	2½%		5	12	6
,, tierces	,, Hull	2½%		5	5	0
,, ,,	f. o. b. Glasgow	2½%		6	0	0
,, (Lump) barrels	f. o. b. Liverpool	2½%		5	0	0
,, tierces	,, ,,	2½%		4	17	6
,, barrels	Hull	2½%		4	17	6
Alum, tierces	f. o. b. [illegible]	2½%		5	7	6
,, ,,	f. o. b. Glasgow	2½%		5	10	0
Alumina Sulphate Paper	,, Tyne	net		3	10	0
Aluminoferric Cake, finest, pieces	[illegible]			2	15	0
,, ,,				3	2	6
Alumina Cake, finest	[illegible]			2	15	0
Blanc Fixe	f. o. b. Tyne	net		5	15	0
Bleach	[illegible]	net		4	0	0
,, (soft wood)	[illegible]	net		4	7	6
,, (hard wood)	[illegible]	net		5	0	0
,, (soft wood)	[illegible]	net		4	15	0
Borax (crystals)	[illegible]	net	13	0	0	
,, (powdered)	[illegible]	net	14	0	0	
Caustic White, 76%	[illegible]	net	10	10	0	
,, ,, 70%	,,	net	10	5	0	
,, ,, 76%	[illegible]	net	9	15	0	
,, ,, 70%	[illegible]	net	9	12	6	
,, ,, 60%	[illegible]	net	8	15	0	
Caustic Bottoms	[illegible]	net	6	5	0	
Chlorine of Bleach	[illegible]	net	6	5	0	
Hypo-Sulphite of Soda	[illegible]		5	—	6	
,, ,,	[illegible]		5	—	6	
Oxalic Acid	[illegible]	net			4	
Salt Cake	[illegible]			1	6	
Satin White	[illegible]			5	5	0
Soda Ash, Carbonated 52%	[illegible]	net	6	2	6	
,, ,, 48%	[illegible]	net	6	0	0	
Soda Ash, Carbonated 52%	[illegible]	net	6	0	0	
Soda Ash, Carbonated 48%	[illegible]	net	5	—	6	
Soda Ash, Caustic 76%	[illegible]		6	5	0	
Soda Ash, Caustic 70%	[illegible]		6	—	6	
Sal Ammoniac (dust)	[illegible]		41	6	—	
,, (lumps)	[illegible]		41	6	—	
Soda Crystals	[illegible]		3	2	6	
,, ,, ...	[illegible]		3	5	—	
,, ,, ...	[illegible]		3	7	6	
Sulphate of Ammonia ...	[illegible]				—	
Sulphate of Copper ...	[illegible]				2	
Sulphur, refined ...	[illegible]		6		7	
,, flowers ...	[illegible]				—	
,, resublimed ...	[illegible]		5	—	6	

FOREIGN CHEMICALS.

Bleaching Powder, 35%	[illegible]		4	—
Hypo-Sulphite of Soda	[illegible]			—
White Copper or Lead	[illegible]		21	—
Sulphate of Alumina	[illegible]			—
Zinc White	[illegible]		5	—

STRAW PULPS.

Straw	[illegible]			—
,, ...	[illegible]			—
Dust	[illegible]			—

CHEMICAL WOOD PULPS.

GREAT BRITAIN.

Prices, c.i.f. London, Manchester, Grimsby, etc.

Sulphite, Bleached	£11 10	0	—12 0 0
,, Unbleached, 1st quality ...	8 15	0	— 9 0 0
,, ,, Ordinary ...	8 5	0	— 8 15 0
,, ,, 2nd quality ...	7 15	0	— 8 0 0
Soda, ,, ... 1st quality ...	7 10	0	— 7 15 0
,, ,, ... 2nd ,, ...	7 0	0	— 7 5 0

FRANCE.

C.i.f. Rouen per 100 kilos. (2 cwt.).

Sulphite, Unbleached, 1st quality ...	Frs.	22—23
,, Ordinary		20—21
,, ,, 2nd quality ...		18—20
,, Bleached, Superior		30 32
,, Inferior		26—28
Soda and Sulphate, Unbleached ...		19—22
,, ,, 2nd quality ...		18—19

UNITED STATES.

Sulphite, American, Bleached	2.50c—	2.50
,, ,, Unbleached	1.85 —	2.10
,, Foreign, Bleached	3 —	3.30
,, ,, Unbleached	1.95c—	2.15c
Soda, American, Bleached	2.10c—	—
Soda, American Unbleached	2.50c—	2.60c
,, Foreign Bleached	2.55 —	2.85
,, ,, Unbleached	1.80 —	1.90

MECHANICAL WOOD PULPS.

GREAT BRITAIN.

Prices, c.i.f. London, Manchester, Preston, Grimsby, etc.:

Pine, 50% moist, [illegible] delivery ...	£2	2	6
,, ,, [illegible] delivery ...	2	5	0
,, ,, [illegible] delivery ...	4 5 0	—4	10 0
,, ,, [illegible] delivery ...	4 15 0	—5	0 0

FRANCE.

Prices, per 100 kilos. (2 cwt.).

Pine, 50% moisture	Frs. 11	—11.50
,, dry	11.50	—12
Aspen, free from mechanical, 50% moisture	15.50	—16.50
Brown (half mechanical), 50% moisture	10.50	—12
,, ,, dry	11	—11.50

UNITED STATES.

Prices, [illegible] per 2,000 lb. — 18 dols.

ESPARTO.

Prices, [illegible] Leith, Preston, Grimsby and [illegible]

Spanish [illegible]	—	—	£4	—	4 12 6
[illegible]	—	—	5	2	5 7 6
Oran [illegible]	—	—	3	2	3 6
[illegible]	—	—	3	5	3 12 6
Tripoli [illegible]	—	—	3	8	3 10 0
[illegible]	—	—	3	3	3 5 0
[illegible]	—	—	3	10	3 12 6
Barbary Grass	—	—	3	3	3 10 0

ESPARTO PULP.

[illegible]

Digitized by Google

FOREIGN RAGS.

FRENCH.

Quotations f.o.b. Rouen

Extra Linens	—	Blue Linen, No. 1 ...	8/0
White Linens, No. 1 ...	22/0	Fustians	4/0
,, No. 2 ...	17/0	Old Bagging (solid) ...	2/9
,, No. 3 ...	14/0	,, (common)	1/0
,, No. 4 ...	8/0	Hemp, tarred in coils	11/0
,, No. 5 ...	4/6	Hemp strings	10/0
Gray Linens (strong)	13/0	New Cuttings.	
,, (extra) ...	16/0	White Linen, ...	33/0
White Cotton, No. 1 ...	13/0	Unbleached Linen ...	30/0
,, No. 2 ...	9/0	Gray Linen	23/0
,, No. 3 ...	7/6	Extra White Cotton...	19/0
,, No. 4 ...	6/0	Ordinary ,, ...	18/0
,, No. 5 ...	3/0	Curtain Cuttings ...	17/0
White Knitted ...	17/0	Stay ,, ...	15/0
Muslins	6/0	Extra Light Prints ...	13/0
Extra Light Prints ...	8/0	Unbleached Cotton ...	21/0
Light Prints	4/0	Oxford	13/0
Dark Prints	1/6	Flanellettes	15/0
Blue Cotton, No. 1 ...	5/6	Blue Cotton	10/0

GERMAN.

Quotations are as follows

NWC	19/0	Dark Cottons	2/10
SPFFF	20/0	Grey Linens I. ...	11/10
SPFFF and SPFF ...	18/0	,, II.... ...	7/0
SPFF	15/0	CSPFFF	13/10
SPF	12/0	CSPFF	9/10
Light Prints	7/0	CSPF	7/5
Fustians	3/10	Dark Blues (selected)	7/0
Mixed Coloured Cottons	3/10	Jute, No. I.	3/0
		,, No. II.	1/0

PRUSSIAN.

C.i.f. London, Hull, or Leith.

SPFF	13/6	CC (cotton)	3/0
SPF	9/0	Jute I	2/3
FG	8/0	,, II	1/6
LFB	6/3	Rope I	7/3
FF	3/0	,, II	4/3

BELGIAN.

Quotations, f.o.b. Ghent.

White Linens, No. 1	21/0	House Cloths... ...	2/6
,, ,, No. 2	16/0	Old Bagging (solid)...	3/0
,, ,, No. 3	12/0	,, ,, (common)	2/6
Fines (Mixed)	12/0	New.	
Grey Linens (strong)	9/6	White & Cream Linens	5/0
,, (extra)	14/0	White Cuttings ...	22/0
Blue Linens	8/0	Unbleached Cuttings	21/0
White Cottons No. 1 ...	18/0	Print Cuttings ...	8/0
,, No. 2 ...	15/0	Flax and Hemp Waste.	
Outshots No. 3... ...	10/0	Flax Waste, washed and dri'	10/0
Seconds No. 4	7/9	Fair	8/0
Prints (Light)	7/0	Flax Card Waste ...	6/0
Fustians (Light) ...	3/6	Hemp Waste, No. 1...	8/0
Fustians (Dark) ...	2/0	,, ,, No. 2...	3/0
Black Cottons ...	3/0		
Hemp Strings (ass't'd)	2/3		

DUTCH.

F.o.r. English ports.

Whites, No. 1	14/9	W. Manilla Rope (coils)	7/3
,, No. 2... ...	9/9	do. Tarred ,, ...	4/9
,, No. 3... ...	6/6	Canvas No. 1	14/0
Grey Linens	8/6	,, No. 2	10/0
Clean House Cloth ...	3/0	,, No. 3	6/0
Mixed Fustians ...	4/9	W. Untarred Rope ...	10/0
Coloured Prints ...	2/7½	Paper Shavings ...	
Dark Prints	2/1½	Free from wood ...	7/0
Blue Cottons	5/6	Mixed Bagging ...	2/7½
Light Lilac Cottons	7/0	Bright New Gunny...	3/6
Muslins	9/9	New Bleached Cuttings...	17/6
Mixed Hemp Rope Coils...	8/3	Unbleached Cuttings	16/6
Broken (in bags) ...	6/0		

NORWEGIAN.

C.i.f. London, Hull, Tyne, and Grangemouth.

1st Rope (tarred)	8/3-9/0	2nd Canvas	7/6
2nd ,, ,, ...	5/6-5/9	Jute Bagging	
Manilla Rope (white)	10/6-11/0	Gunny	3/0-3/3
Best Canvas ...	11/9-12/0	Mixed	2/0-2/6

TURKISH.

F.o.b. Constantinople (per 100 kilos)

Whites, 1st ...	Francs 10	Ropes, Thick ...	Francs 10
,, 2nd ...	,, 5	,, Medium	,, 12
Coloured ...	,,	,, Thin	,, 15

STRAW.

Oat, ex steamer Thames	£1	7	6
Wheat ,, ,, ...	2	2	0

HOME RAGS.

LONDON.

N. White Cuttings	21/6-26/0	Canvas No. 1 ...	14/0-15/0
Fines (selected) ...	19/6-21/0	,, No. 2 ...	9/6-10/0
,, (good London) ...	17/0-17/6	,, ,, 3 ...	5/0
Outshots (selected)	10/0-13/0	Mixed Rope ...	2/9-3/3
,, (ordinary)	8/0-9/0	White Manilla Rope	8/0-9/0
London Seconds	1/6-1/9	Coil Rope	8/0
Country ,,	3/0-7/0	Bagging	1/3-1/9
London Thirds ...	0/9-1/3	Gunny	2/0-2/6
Country ,, ...	2/0		

BRISTOL.

Fines	17/6	Clean Canvas ...	13/6
Outshots	9/0	Second ,, ...	9/6
Seconds	5/0	Light Prints ...	6/6
Thirds	2/6	Hemp Coil Rope	9/0
Mixed Bagging ...	2/6	Tarred Manilla ...	7/0

MANCHESTER.

Fines	14/0-15/0	Blues	3/6-4/0
Outshots (best) ...	8/6-9/6	Bagging	2/3-2/6
,, (ordinary)	7/6-8/0	,, (common)	1/6-2/0
Seconds	4/0-4/6	W. Manilla Rope	9/0-10/0
Thirds	2/0-2/3	Surat Tares ...	2/9-3/0

EDINBURGH.

Superfines	15/0	W. Manilla Rope	9/6-10/0
Outshots	12/0	Tarred Manilla Rope	6/0
Mixed Fines ...	14/0	,, Hemp Rope	8/0
Common Seconds	8/0	Rope Ends (new)	5/0
First ,,	11/0	,, ,, (old)	3/0
Prints	6/0	Bagging	2/0-2/3
Canvas (best) ...	14/0	,, (clean) ...	3/0-4/0
,, 2nd ...	9/0		
Black Cottons ...	2/0		

GLASGOW.

Fines	19/6-16/0	Canvas No. 1 ...	15/0
Blues	4/6	,, No. 2 ...	10/0
Common Blues ...	3/3	Manilla Rope ...	8/0
Bagging	4/0	Tarred Hemp ...	9/0

DUBLIN.

White Cuttings ...	16/0	Mill Bagging ...	2/6
Fines	9/0	White Manilla ...	8/0
Seconds	4/6	Tarred Hemp ...	6/0
Light Prints ...	1/6	Rigging	10/0
Black ,, ...	1/0		

JUTE.

Good White	£17	0	0	19	0	0		
Good	14	10	0	16	10	0		
Medium	12	0	0	13	0	0		
Common	11	0	0	12	0	0		
Rejections	9	10	0	10	0	0		
Cuttings	5	0	0	8	0			

WASTE PAPERS.

Cream Shavings ...	0/0	Small Letters... ...	3/9
Fine ,, ...	8/0	Large ,, ...	5/0
Mixed ,, ...	4/3	Brown Paper	2/3
White Printings ...	7/9	Light Browns ...	3/9
White Waste	3/0	Dark ,, ...	2/6
Wood Pulp Cuttings	3/3	Books & Pamphlets	3/9
Blue Paper	2/0	Strawboard Cuttings	1/3
Crushed News ...	3/0	Jacquards	2/0

For Export 25s. per ton extra.

BALING TWINE.

Hemp ...	4¼d. per lb.	5d. per lb	5¾d. per lb.
Mixed ...	4¼d. ,,	4¾d. ,,	5d. ,,

STARCH.

F.o.r. London, less 2½%

Maize—	Crisp	£10	15 0
	Pearl	10	10 0
	Powder	11	0 0
	Special	11	10 0
Farina—	Prime...	10	10 0
	B.K.M.F.	14	0 0
	Delivered :		
Rice—	Special (in chests) ... ... net	19	10 0
	Crystal (in bags) ... ... less 2½%.	18	10 0
	Granulated (in bags) ... ,,	17	10 0
	Waste... ... ... ,,	13	0 0
Dextrine—	... ...	14	0 0

ROSIN.

Quotations (ex wharf less 2½% discount) are as under :—

F/C	D	E	F	G	I	K	M	N	W G	W W
7/9	7/10½	8/0	8,3	8,6	9,0	10,6	11/6	12,0	12/6	13/0

Digitized by Google

SIZING.

Prices are nominally as under :—

English Gelatine	...	Per cwt.	£ s. d.
Foreign "	...	"	
Fine Scotch Glues	...	"	
Best Long Scotch Glues	...	"	
Common Black "	...	"	
" Pale " Glues	...	"	
" Pale " Glues	...	"	
Foreign Glues	...	"	
Rosin Size	...	"	
Gelatine Size	...	"	
Dry P. A. Pieces	...	"	
" English Pieces	...	"	
Wet "	...	"	
" Sheep Pieces	...	"	
Patent Hide Clippings	...	"	
" Pocket Waste	...	"	

COLOURS.

Mineral Paints.

Mineral Black	...	Per Ton	£ s. d.
Black Peerless	...	"	
Ochre (English and Irish)	...	"	
Ochre (French)	...	"	
Pure Crawshay Turkey Red	...	"	
Red Oxide and Venetian Red	...	"	
Umber (Derbyshire)	...	"	
" (Irish)	...	"	
Chrome (Pure)	...	Per Cwt.	
Yellow (Imperial)	...	"	
" (Bordeaux)	...	"	

Weights varied according to strength and shade.

Paris Colours, with 50% of Colour (less 2½% for

Orange Pulp	...	Per Cwt.	
Golden Yellow Pulp	...	"	
Lemon Yellow Pulp	...	"	
Primrose Yellow	...	"	
Green (free from Arsenic)	...	"	
Paste Blue, 25%	...	"	
" 35%	...	"	
" 40%	...	"	

LOADINGS, etc.

China Clay, in bulk, f.o.b. Cornwall, 50 to 80 s. per ton.

(Higher grades for tub, tube &c., and extra for ex ship

Devon, Dalbeattie, Lincolnshire, &c. (for best papers), the

commoner qualities 30 to 50 per ton. Duty £1 per

ton, in bags, 50 to 60 per ton; f.o.b. Liverpool, in

bags, extra, 30 to 40 per ton, according to quality.

French Chalk, W.B., W.O., and other brands, £5

15s. 0d. to £6 5s. 0d. per ton, according to quality,

delivered in most Yorkshire and Lancashire towns

also Cash Orders, Bolton and London.

Italian Chalk, Best Brands, f.o.b. Manchester (Importers

of London), W.A., Upperhead Mills, and Crystal

Works, £5 to £5 10s. per ton.

Asbestine, in bags, f.o.b. Liverpool, £5 10s. per ton.

Paper Makers, Plaster, in bags, and Gypsum delivered

Superfine Hardening, delivered Mills, £5 10s. per ton in

bags.

Patent Hardening, £5 10s. per ton.

Mineral White (also known as Terra Alba, and Sulphate

of Lime), £5 10s. per ton, in bags, at makers works.

Satinette, best mineral white, for

Superfine, second quality

Pottery, best quality

Pottery, 2nd quality

Gypsum

Ground

Third quality

Terra Alba, or Gypsum delivered at Lancashire &

Yorkshire stations about £5 per ton extra. Delivered

Chester, which is £6, £5 per ton extra. Delivered

London stations about £6 per ton extra.

Bauxite, minimum alumina 60% £5 per ton.

Sulphate of Alumina, £12 10s. per ton, £13 5s. per ton de

livered in Lancashire.

Sulphate of Barytes, No. 1, £8 per ton; No. 2 £7 5s.

per ton; No. 3, £7 per ton; No. 4 £6 per ton, less 2½%.

Magnesite contains 85% Carbonate of Magnesia, ex

ground, £4 10s. per ton, calcined, £5 10s. per ton.

Magnesite (Crimp), £5 10s. per ton.

Satinite, £3 5s. in sack, f.o.r. Liverpool or Manchester

Oxide of Zinc, £30 per ton.

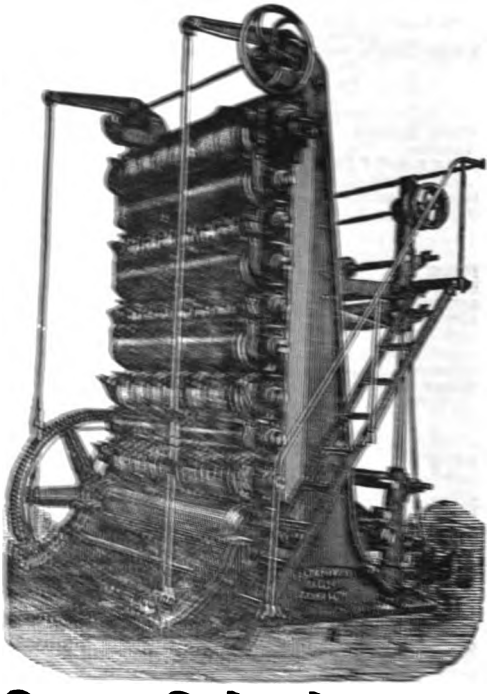
TE.

f.o.r. works

ESCHER WYSS & CO.,

Engineers,

ZURICH, SWITZERLAND.



Super Calenders & Friction Calenders

OF ANY WIDTH

Sole Agent for the U.K.—

ALFRED STEINER, C.E.,

28, VICTORIA STREET, LONDON, S.W.

"TECHNISCHE MITTHEILUNGEN"

unentbehrlicher

WEGWEISER DES PAPIERFACHES"

Technical Dictionary of Paper Trade Terms

in German and English by H. H. BURGESS.

Price, Post Free 2s.

W. JOHNSTON & CO., 98, Shoe Lane, London, E.C.

The British and Colonial Printer and Stationer,

W. JOHN STONHILL & CO., 98, Shoe Lane,

LONDON, E.C.

Digitized by Google

BUSINESS CARDS.

Rates for Weekly Insertions of announcements of this character may be obtained on application to W. JOHN STONHILL & CO., 58, Shoe Lane, London, E.C.

WATER SUPPLIES
NORTON'S PATENT
Abyssinian and Artesian Tube Wells.
LE GRAND & SUTCLIFF,
Hydraulic Engineers,
Magdala Works, Bunhill Row, London

IMPORTANT TO STEAM USERS.
Boiler Composition
For Removal of Scale in Steam Boilers.
MANUFACTURED BY
JAMES EMMETT, Ltd., Reuben Street, LEEDS.

R. & J. GOODHIND, Templar Street, LEEDS,
WHOLESALE
Rag and Paper Stock Merchants.
ALL KINDS OF COTTON & WOOLLEN RAGS, NEW RAGS, BAGGING, &c.
Large Quantities of Clean Unread Newspapers always in Stock. TELEPHONE 797.

JOHN CALDWELL & SONS, Nat. Tel. 390. T. A.: "Fents."
SUN MILLS, ANCOATS, MANCHESTER,
Wholesale Rag and Paper Stock MERCHANTS.
Buyers of Shirt Cuttings, Underclothing Cuttings, Tailors' Cuttings; also all grades of New Rag Cuttings Warehouse Print Tabs, Fents, Twines, &c.
Terms—CASH. Bankers—L. & Y. Bank Shudehill.

R. W. SINDALL, F.C.S.,
15, Borough High St., London, S.E.
ANALYST and CHEMICAL ENGINEER . .
WOOD PULP and PAPER TRADE EXPERT.
THE EXAMINATION OF PAPERS A SPECIALITY

Wilh. MUNDS,
DRESDEN, SAXONY.
REPRESENTATIVE for 19 FACTORIES
CENTRAL OFFICE for the SALE of
Sulphite, Sulphate, Soda
STRAW PULPS,
Bleached and Unbleached,
All Qualities and all Processes.

Telegraphic Address:—"RELIABLE." National Telephone, 1977.
J. BEAUMONT & CO.,
Wholesale Rag & Paper Stock MERCHANTS.
ALL GRADES OF COTTON RAGS, NEW RAGS, BAGGING, Etc.
Pump St., Oldham Road, MANCHESTER.

C. D. EKMAN,
GRAVESEND,
Chemical Engineer,
SULPHITE PULP and PAPER TRADE EXPERT.
SCANDINAVIAN BUSINESS A SPECIALITY.

WILLIAM HANTON SALMON,
Papermakers' Consulting Engineer and Expert,
DESIGNS, PLANS AND ESTIMATES PREPARED, VALUATIONS, &c.
Address: 35, DARNLEY ROAD, GRAVESEND.

CORNBROOK CHEMICAL Co.,
STOCKPORT LIMITED,
(Successors to ROBERTS DALE & Co., Manchester & Warrington)
DRY & PULP COLOUR MANUFACTURERS
For the PAPER TRADE.
Paste Blues, Chromes, etc.
Any sample matched. Enquiries solicited.

BFV BLEACHED SULPHATE,
Kommanditbolaget C. Fr. Wærn & Co.,
GOTHENBURG.

PATENTS, INVENTIONS, &c.

READERS of this Paper who have an **Idea** for a **Patent**, or desire **information** or **Advice** in connection with Inventions, &c., should communicate with the Patent Editor, who will supply full particulars direct by letter, free of charge.

Address: *The World's Paper Trade Review*, 58 SHOE LANE, LONDON, E.C., and write on the left hand corner of the envelope the word "Patents."

Digitized by Google

General Notes.

ALMA PRESS, LTD., WEST HARTLEPOOL.—Lien registered March 16th, for £750 five per cent. debentures; no trustees; charged on all the property, including the uncalled capital.

"CAMBRIA DAILY LEADER" CO., LTD., SWANSEA.—Lien registered March 14th, for £500 five per cent. "A" debentures, part of £2,500; amount previously issued, £800; charged on the copyright of the *Cambria Daily Leader* and other newspapers, premises in Swansea, and all the plant, stock, and machinery.

THE new commercial treaty between China and Japan makes provision for the protection of registered copyrights.

IT is proposed to hold a Trades and Industries Exhibition at Newcastle-on-Tyne in the autumn of this year.

A USEFUL little work has been published by Messrs. Merritt and Hatcher, Grocers' Hall-court, E.C. It is entitled "Oil Engines: Their Selection, Erection, and Correction." The oil engine has rapidly gained a place as a power producer during the past few years, especially in places where a supply of gas or electricity is not readily available, and a practical treatise like this cannot fail to be of much service to users of these engines. The first part of the book deals with the various descriptions of petroleum fuel, the advantages of oil engines, and explanations of their working. In the second part purchasers are initiated into the details of the various makes now on the market, and hints are given to assist in making a selection. Parts three and four are written specially for the workmen and attendants, and there is an appendix given to assist in the comparison between the various builds of oil engines. The book is published at one shilling net.

"WORLD'S PRESS."—Sell's Dictionary of the World's Press for 1904 is now issued, and will be welcomed by all who are acquainted with its usefulness as a book of reference, and the interesting and concise information it conveys on some of the leading topics of the year in newspaperdom. Among the special features, we may mention "Newspaper Happenings," a summary of the year's events in the newspaper world, from January 1st to December 31st; articles by the Hon. C. A. Duff-Miller (agent-general for New Brunswick), and by Mr. J. H. Turner on Britain in the Pacific (both illustrated), these completing the series of colonial subjects which have been dealt with in previous volumes. Lists of all newspapers in England, Ireland, Scotland, and Wales, and lists of magazines, class and trade papers, etc., are given in the various sections; also the name and particulars of the papers published in the British Dominions beyond the seas. The annual contains 18,000 entries and upwards of 4,000 separate newspaper announcements. The total number of papers published in the British Isles is given as 2,558, of which 554 are published in London. A list of the London offices of various colonial and foreign papers also will be found very serviceable.

AUSTRALIAN PATENT LAWS.—Messrs. W. P. Thompson and Co., Patent Agents, write:—Your readers will probably be interested in hearing that the Governor-General in Council of Australia has decreed, in accordance with the new Federal Law, that patent applications for Australia can now be formally made at the custom house of the capital city of each state. Applications so filed will be marked with the date, hour, and minute of receipt, and the applications will be subsequently recorded at the Patent Office as having been filed at that date. Applications thus filed will not be merely taken in order of their dates, but they will be held to be dated as far as regards novelty from the date of actually filing at the custom house unless dated under the convention. Under the convention nearly all the principal countries and colonies have agreed to grant the right to a patentee who has filed an application for a patent in one of the countries or colonies to date any or all the other applications he may make for the same invention in other realms during the year, as of the date of his original first application. The application in Australia can either be a provisional one, or a complete. The fees and stamp duties are just double those of an application for Great Britain and Ireland.

ERNEST JOYCE AND CO., LIMITED.—Registered with a capital of £5,000, in £1 shares (20 voting and 4,980 ordinary), to carry on the business of agents, stationers, newsagents, newsvendors, printers, publishers, newspaper, magazine, journal and periodical proprietors, etc. No initial public issue. The first directors (to number not less than three nor more than seven) are to be appointed by A. P. Green and J. H. Forrester. Qualification, one voting share.

PRESS IMPROVEMENTS, LIMITED.—Registered with a capital of £3,000, in £1 shares, to acquire the business carried on at Denlico Works, Stewarts-road, Battersea, and elsewhere, by Charles Surtees (otherwise Charles Sureties), as the Nonpareil Manufacturing Co., to take over certain inventions relating to improvements in apparatus for producing a new paper for stereotype matrices and for wall paper, ceilings, and decorative purposes, and to carry on the business of flong manufacturers, dealers in printers' materials, etc. No initial public issue. The first directors are E. A. Hunt, C. Lamb, H. G. Wells, and H. Simon. Qualification, £100.

Digitized by Google

DIRECTORY.

Names and Addresses under these Headings will be charged for at the rate of 50/- per annum (52 insertions) for each card of two lines or under. Each additional line £1 per annum extra. Fresh headings are inserted when necessary.

ABYSSINIAN TUBE WELLS.

LE GRAND & SUTCLIFF, 125, Bunhill Row, London, E.C. . . . . Artesian Well Engineers.

ANALYSTS.

HURST, GEORGE H., F.C.S., 22, Blackfriars Street, Manchester. Speciality—Wood Pulp Sampling.

ARTESIAN WELLS.

ABUNDANT WATER SUPPLIES Co., apply to C. Isler and Co., Bear Lane, Southwark, S.E

ISLER, C. & Co., Bear Lane, Southwark, London, S.E.

CHINA CLAY.

BEST (JAMES) & SONS, Stoke-on-Trent. Specially Prepared China Clay for Papermakers. Stocks at Runcorn and Preston. Mines—Cornwall.

BODELVA & LANTERN CHINA CLAY Works. Stocks at Runcorn. Address J. Fletcher Pagan 88, Rumford Place, Liverpool. 7885

CHINA CLAY Co., 4, St. Ann's Square, Manchester. Mines: St. Austell, Cornwall. Stocks: Manchester, Preston, Runcorn, Leith. 8855

ROGERS, J. & Co., Truro, Cornwall.— Agents, W. G. Taylor and Co., Ltd., 83, Queen Victoria Street, London, E.C., and 29, St. Andrew's Square, Edinburgh.

W. SINGLETON BIRCH & SONS, Ltd., 15, Upton Street, Manchester. Mines: Rosevear, St. Austel, Cornwall.

COLOURS.

CARDWELL, J. L. & Co., Cromwell Buildings, 11, Blackfriars Street, Manchester. Specialities: Mineral Black, Ven. Red, Ochres, and Umbers.

HINSHELWOOD, Thos., & Co., Glasgow. Manufacturers of High-Grade Colours of all classes. Samples submitted or matched on application.

LEVINSTEIN LIMITED, Crumpsall Vale Works, Manchester. Warehouse, 21, Minshull Street. Manufacturers of Specialities for Paper dyeing in all shades. Blackley Blues, Scarlets, &c. Whitcol P.A. for sizing.

The VIA GELLIA COLOUR Co., Matlock-Bath. Colours in every variety. Mineral Black. Washed Golden Ochres and Umbers. Enquiries solicited.

MINERAL WHITE.

BELVOIR, Newark-upon-Trent. The first makers in Newark, 1850.

CAFFERATA & Co., Newark-upon-Trent. Established over 40 years. Largest makers of Mineral White in the Kingdom.

HOWE, John & Co., Carlisle.

RAGS.

CHALMERS, E. & Co., Ltd., Bonnington, Leith.

SIZING, etc.

The GROVE CHEMICAL CO., Ltd., Appley Bridge, near Wigan, Lancashire. Glues, Gelatine, Size, Albumenoid, Dextrines, Farina, Starch, Painters' Glue, etc.

STEEL & BRONZE TOOLS.

MAKIN, Wm. & SONS, Sheffield, Established 1726. Roll Bars, Plates, Cutter Knives, Doctor Blades, etc.

STRAWBOARD CENTRES.

BOYD, HART & CO., Makers of Round, Square, and Square Centre Shells, 21, Exchange Square, Glasgow. Telegraphic address: "Strawboard." 9341

TALC.

LASSALLE, TH., Montlucon, France.

GYPSUM & TERRA ALBA.

WINSER & Co. (GOTHAM Co., LTD.), 312, Deansgate, Manchester, and Kegworth Mills, near Derby. Established over 40 Years.

VENTILATING AND INDUCED DRAUGHT FAN MAKERS.

SAVE ON YOUR COAL BILL by using our Induced Draft Fan. At Oldham with three Boilers we are doing work that previously required four, and saving £28 a month in fuel. Write for particulars—SUTCLIFFE VENTILATING AND DRYING CO. Ltd., Cathedral Corner, Fennel Street, Manchester, Telephone No. 3920. Telegraphic Address: "VENTILABRO."

WOOD PULP.

ALSING & Co., Ltd., 110, Cannon Street, London, E.C. Agents for the well-known "K.K." Soda Pulp; also Sulphite and Mechanical.

GRANT, W. & Co., 4a, St. Andrew Square, Edinburgh. Agents for best shippers, Sulphite and Sulphate, Mechanical, Pine, Brown, Aspen.

WERTHEIM, A. & Co., Hamburg.

THE MANCHESTER ANILINE Co.,

20, High Street, Manchester.

SPECIALITIES:

MAGENTA, VIOLET, GREEN, METANIL YELLOW.

Mill-Hand Edition.

A Special Edition of *The World's Paper Trade Review* is published for supply only to bona-fide employees in Paper Mills.

The Annual Subscription is 6s. 6d., or 3s. 3d. for six months, PAYABLE IN ADVANCE.

New subscriptions are not accepted for any less period than six months, and must terminate at the end of a quarter, i.e., the last week in March, June, September, or December, and not at odd periods. Foreign subscribers must add, when remitting, the extra postage, i.e., 1s. 1d. for six months, or 2s. 2d. for the year.

The receipt of a copy in a COLOURED WRAPPER denotes the termination of a subscription.

Offices: 58, Shoe Lane, London, E.C.

Digitized by Google

BRITISH IMPORTS of CHEMICAL and MECHANICAL WOOD PULP

For the Week Ended March 26th, 1904.

SPECIALLY COMPILED FOR THE BRITISH WOOD PULP ASSOCIATION.

An Official Account of the Registered Quantities and Values of Chemical and Mechanical Wood Pulp imported at the various ports of the United Kingdom.

CHEMICAL—DRY.

Date.	Ports.	Vessel.	Port whence.	Packages.	Quantity.	Value.	Importer.
1904.					Tons.	£	
March 21	London ...	Thule ...	Gothenburg ...	170 bales	25	210	Phillipps & Graves
,, 21	,, ...	Import ...	Rotterdam ...	250 ,,	50	394	H. B. Wood
,, 22	,, ...	Bonheur ...	Christiania ...	200 ,,	25	196	Andrews & Co.
,, 22	,, ...	,, ...	,, ...	240 ,,	30	250	,,
,, 22	,, ...	City of Cork ...	Oporto ...	500 ,,	50	350	Caima Timber Estate and Wood
,, 23	,, ...	Bonheur ...	Christiania ...	16 ,,	2	15	Andrews & Co. [Pulp Co.
,, 24	,, ...	Bergsund ...	Stockholm ...	80 ,,	10	85	W. G. Taylor & Co.
,, 25	,, ...	,, ...	Norrkoping ...	90 ,,	15	117	Andrews & Co.
,, 25	,, ...	,, ...	,, ...	360 ,,	60	470	,,
,, 26	,, ...	Thorsten ...	Gothenburg ...	160 ,,	20	155	Henderson, Craig & Co.
,, 22	Hartlepool ...	Agne ...	,, ...	385 ,,	65	550	W. Hartlep'l St'm Navigation Co.
,, 22	,, ...	Kaiser ...	Hamburg ...	30 ,,	6	50	,, ,,
,, 22	,, ...	Lindholmen ...	Gothenburg ...	125 ,,	25	200	H. Raby & Mather
,, 21	Hull ...	Volturno ...	Trieste ...	200 ,,	20	140	T. Wilson, Sons & Co.
,, 21	,, ...	Salmo ...	Drontheim ...	80 ,,	10	76	,, ,,
,, 22	,, ...	Montebello ...	Christiania ...	81 ,,	10	74	,, ,,
,, 25	,, ...	Angelo ...	,, ...	60 ,,	10	70	,, ,,
,, 25	,, ...	Juno ...	Hamburg ...	282 pkgs.	35	245	,, ,,
,, 22	Manchester ...	Helge ...	Gothenburg ...	560 bales	70	500	Johnsen, Jorgensen & Wettre
,, 22	,, ...	,, ...	,, ...	160 ,,	20	145	H. Raby & Mather
,, 23	,, ...	Rogaland ...	,, ...	680 ,,	84	690	W. G. Taylor & Co.
,, 23	,, ...	,, ...	,, ...	1,360 ,,	200	1,586	H. Newall & Son
,, 23	,, ...	Helge ...	,, ...	72 ,,	12	96	Andrews & Co.
,, 23	Newcastle ...	Royal Dane ...	Hamburg ...	200 ,,	25	212	Tyne Steam Shipping Co.
,, 22	Queenboro' ...	Diana ...	Stenkjar ...	2,400 ,,	300	2,320	E. Lloyd, Ltd.
,, 22	South Shields	Sovereign ...	Christiania ...	96 ,,	12	96	P. H. Matthiessen & Co.
,, 22	,, ...	,, ...	,, ...	120 ,,	15	118	Becker & Co.
,, 18	Teignmouth	Commercial ...	Uddevalla ...	3,456 ,,	482	3,600	Berner & Nielsen
,, 21	Granton ...	Bele ...	Gothenburg ...	80 ,,	12	94	Chr. Salvesen & Co.
,, 21	,, ...	Girdleness ...	Drammen ...	1,106 ,,	136	1,090	,, ,,
,, 21	,, ...	,, ...	,, ...	400 ,,	50	400	Becker & Co.
,, 21	Leith ...	Stettin ...	Konigsberg ...	113 ,,	20	160	J. Currie & Co.
,, 23	,, ...	Amur ...	Reval ...	420 ,,	93	840	A. Schultz & Co.
,, 24	,, ...	Britannia ...	Rotterdam ...	14 pkgs.	2	16	G. Gibson & Co.
,, 25	Belfast ...	Fair Head ...	Reval ...	429 bales	94	752	G. Heyn & Co.
March 10	Barrow ...	Avis ...	Halmstad ...	704 bales	70	563	T. Pollitt & Co.

Value corrected to £146.

CHEMICAL—WET.

					Tons.	£	
1904. Query March 10	Barrow ...	Avis ...	Halmstad ...	1,626 bales	280	980	T. Pollit & Co.
,, 25	Hull ...	Angelo ...	Christiania ...	100 ,,	10	40	T. Wilson, Son & Co.
,, 23	Manchester ...	Argyle ...	,, ...	36 ,,	5	22	Berner & Nielsen

MECHANICAL—DRY.

					Tons.	£	
1904. March 25	Manchester ...	Helge ...	Gothenburg ...	408 bales	60	270	Becker & Co.

MECHANICAL—WET.

					Tons.	£	
1904. March 21	London ...	Pollux ...	Uddevalla ...	700 bales	105	210	Becker & Co.
,, 22	,, ...	Bonheur ...	Drammen ...	1,970 ,,	197	458	,,
,, 24	,, ...	Carl XV. ...	Gothenburg ...	35 ,,	7	24	W. E. Bott & Co.
,, 26	,, ...	Oxford ...	Drammen ...	250 ,,	50	115	Berner & Nielsen
,, 21	Grimsby ...	Sara ...	,, ...	6,500 ,,	1,270	2,860	Maxwell, Holm & Co.
,, 23	,, ...	Aberforth ...	Kragero ...	2,718 ,,	544	1,223	Becker & Co.
,, 23	,, ...	,, ...	Drammen ...	1,750 ,,	240	540	,,
,, 22	Hull ...	Montebello ...	Christiania ...	100 ,,	20	45	T. Wilson, Sons & Co.
,, 23	Manchester	Argyle ...	,, ...	3,250 ,,	400	813	Andrews & Co
,, 24	,, ...	,, ...	Skien ...	500 ,,	100	220	H. Raby & Mather
,, 21	Queenboro' ...	Arthur ...	Halmstad & Drammen	11,720 ,,	1,372	2,847	E. Lloyd, Ltd.
,, 22	,, ...	Diana ...	Stenkjar ...	4,500 ,,	900	1,870	,,
,, 25	,, ...	Ragni ...	Drammen ...	5,900 ,,	1,180	2,450	,,
,, 22	South Shields	Sovereign ...	Christiania ...	800 ,,	160	325	P. H. Matthiessen & Co.
,, 22	,, ...	,, ...	Arendal ...	650 ,,	130	260	,, ,,
,, 23	Grangemouth	Jeanne d'Arc ...	Christiania ...	1,360 ,,	175	562	J. T. Salvesen & Co.

Digitized by Google

BUSINESS CARDS.

Rates for Weekly Insertions of announcements of this character may be obtained on application to W. JOHN STONHILL & CO., 58, Shoe Lane, London, E.C.

JEAN FREESE,
Dealer, Importer, Agent.
China Clay,
Paper Stocks,
Sulphite Pulps,
Bleaching Powder.
310, Vanderbilt Building,
132, Nassau Street,
NEW YORK CITY.
Correspondence Solicited.

BF V BLEACHED SULPHATE,
Kommanditbolaget C. Fr. Wærn & Co.,
GOTHENBURG.

CORNBROOK CHEMICAL Co.,
STOCKPORT LIMITED,
(Successors to ROBERTS DALE & Co., Manchester & Warrington
DRY & PULP COLOUR MANUFACTURERS
For the PAPER TRADE.
Paste Blues, Chromes, etc.
Any sample matched. Enquiries solicited.

Telegraphic Address:—"RELIABLE." National Telephone, 1977.
J. BEAUMONT & CO.,
Wholesale Rag & Paper Stock
MERCHANTS.
ALL GRADES OF COTTON RAGS, NEW RAGS, BAGGING, Etc.
Pump St., Oldham Road, MANCHESTER.

PAPER BAG MAKING MACHINERY
Latest Improvements.
BUMSTED AND CHANDLER,
Cannock Chase Foundry, Hednesford, Staffs.

C. D. EKMAN,
GRAVESEND,
Chemical Engineer,
SULPHITE PULP and PAPER TRADE EXPERT.
SCANDINAVIAN BUSINESS A SPECIALITY.

R. W. SINDALL, F.C.S.,
15, Borough High St., London, S.E.
ANALYST and CHEMICAL ENGINEER . .
WOOD PULP and PAPER TRADE EXPERT.
THE EXAMINATION OF PAPERS A SPECIALITY

WILLIAM HANTON SALMON,
Papermakers' Consulting Engineer and Expert,
DESIGNS, PLANS AND ESTIMATES PREPARED, VALUATIONS, &c.
Address: 35, DARNLEY ROAD, GRAVESEND.

WATER SUPPLIES
NORTON'S PATENT
Abyssinian and Artesian Tube Wells.
LE GRAND & SUTCLIFF,
Hydraulic Engineers,
Magdala Works, Bunhill Row, London

IMPORTANT TO STEAM USERS.
Boiler Composition
For Removal of Scale in Steam Boilers.
MANUFACTURED BY
JAMES EMMETT, Ltd., Reuben Street, LEEDS.

R. & J. GOODHIND, Templar Street, LEEDS,
WHOLESALE
Rag and Paper Stock Merchants.
ALL KINDS OF COTTON & WOOLLEN RAGS, NEW RAGS, BAGGING, &c.
Large Quantities of Clean Unread Newspapers always in Stock. TELEPHONE 797.

JOHN CALDWELL & SONS, Nat. Tel. 390. T. A.: "Fents."
SUN MILLS, ANCOATS, MANCHESTER,
Wholesale Rag and Paper Stock
MERCHANTS.
Buyers of Shirt Cuttings, Underclothing Cuttings, Tailors' Cuttings; also all grades of New Rag Cuttings
Warehouse Print Tabs, Fents, Twines, &c.
Terms—CASH. Bankers—L. & Y. Bank, Shudehill

Digitized by Google

AMERICAN IMPORTS OF

Paper, Paper Stock, Chemicals, &c.

The following is the latest weekly list, compiled from official returns, of American imports from the ports mentioned:—

Paper.

ANTWERP.—New York: 13 bales, Hendt and Co.; 10 cases, W. Seyd; 20 cases, Sheldon and Co.; 18 cases, Kupfer and Co.; 16 cases, Stursberg Schell and Co.; 47 cases, Dejonge and Co.; 2 cases, L. C. Wagner; 1 case, A. and L. Metzgar; 10 cases, Vandergrift and Co. Boston: 11 cases, Kupfer Bros.; 11 cases, C. W. Fisher; 102 cases, Munderlap and Co. Philadelphia: 13 cases, Hartung and Co.; 21 cases, C. Beck Paper Co.

BREMEN.—New York: 9 cases, Hensel Bruckmann and Lorbacher.

HAMBURG.—New York: 2 cases, C. Kahlen; 2 cases, Knauth Nachod and Kuhne; 165 rolls, 9 cases, Dingelstedt and Co.; 5 cases, Guetteman, Rosenfeld and Co.; 2 cases, H. Lips; 24 cases, A. Kraut; 6 cases, Bainbridge and Co.; 5 cases, T. Molloy. Boston: 1 case, Downing and Co. Philadelphia: 20 bales, Atlantic Transport Co.

LONDON.—New York: 31 cases, J. Atkins; 24 cases, Downing and Co.; 14 cases, J. W. Hampton, junr. Boston: 26 cases, Downing and Co.

LIVERPOOL.—Philadelphia: 23 cases, Keystone Blue Print Co.; 27 cases, C. Beck Paper Co.

ROTTERDAM.—New York: 123 packages, Amsinck and Co.; 31 cases, A. Kraut; 11 cases, Miller, Sloan and Wright; 1 case, Heine and Co.

Manillas.

HAMBURG.—New York: 60 bales, Salomon Bros. and Co.

LONDON.—New York: 32 bales, Lyon and Co. Boston: 203 coils, Hollingsworth and Vose Co.

Rags.

ANTWERP.—New York; 42 bales, Goldman Sachs and Co. Boston: 120 bales, to order. Philadelphia: 117 cases, Jessup and Moore Paper Co.

HAMBURG.—New York: 110 bales, Salomon Bros. and Co. Boston; 38 bales, F. Salomon and Co.; 258 bales, Salomon Bros.; 90 bales, Train, Smith and Co. Philadelphia: 61 bales, Brown Bros. and Co.; 66 bales, Jessup and Moore Co.

LEGHORN.—New York: 48 bales, Train, Smith and Co.

LIVERPOOL.—New York: 341 bales, Atterbury Bros.

LONDON.—New York: 68 bales, Castle, Gottheil and Co.; 54 bales, F. Salomon and Co.; 67 bales, Darmstadt and Scott. Philadelphia: 73 bales, Knight and Co.

ROTTERDAM.—New York: 166 bales, Millar and Co.; 69 bales, Castle, Gottheil and Co.

MANCHESTER.—Philadelphia: 138 bales, Brown Bros. and Co.

Waste Paper.

GLASGOW.—New York: 310 bales, Lyon and Co.

LONDON.—Boston: 276 bales, Wheelwright Paper Co.; 182 bales, Crocker Burbank and Co.; 153 bales, Butterworth and Co.; 393 bales, Haverhill Box Board Co.; 400 bales, Train, Smith and Co. Philadelphia: 88 bales, to order; 120 bales, Brown Bros. and Co.

Wood Pulp.

ANTWERP.—Boston: 559 bales, Bertuch and Co.

COPENHAGEN.—New York: 812 bales, 100 tons, Bertuch and Co. Boston: 104 bales, Aspergren and Co.; 120 bales, Page, Newell and Co.; 400 bales, Stone Downer and Co.; 7,748 bales, Bertuch and Co.

HAMBURG.—New York: 671 bales, 150 tons, R. Helwig; 10 cases, 2 tons, Bougk and Co. Boston: 350 bales, to order. Philadelphia: 104 cases, to order; 401 bales, Jessup and Moore Co.

MANCHESTER.—Philadelphia: 272 bales, to order.

ROTTERDAM.—New York: 101 bales, 10 tons, J. Freese.

Bleaching Powder.

HULL.—New York: 36 casks, J. L. and D. S. Riker.

LIVERPOOL.—New York: 50 casks, J. L. and D. S. Riker. Boston: 106 casks, Linder and Meyer; 46 casks, J. L. and D. S. Riker.

Soda Ash.

LIVERPOOL.—New York: 82 tierces, Wing and Evans. Boston: 32 casks, Linder and Meyer.

Caustic Soda.

LIVERPOOL.—New York: 100 drums, Welsh, Hohne and Co.

China Clay.

LIVERPOOL.—New York: 60 casks, Hammill and Gillespie. Philadelphia: 400 casks, Perkins, Goodwin and Co.; 100 casks, Knight and Co.

MANCHESTER.—Philadelphia: 632 casks, to order; 252 bags, Knight and Co.

Sulphur.

LIVERPOOL.—Boston: 267 bags, Linder and Meyer.

Strawboards.

HAMBURG.—Philadelphia: 826 packages to order.

Papermaking Materials.

MANCHESTER.—Philadelphia: 24 bags, Brown Bros.; 379 bales, British Bank of S. America.

CENTRAL ADVERTISING COMPANY, LTD.—Registered with a capital of £2,000, in £1 shares, to carry on the business of advertising contractors and agents, billposters and distributers, printers, stationers, newspaper and magazine proprietors and publishers, etc. No initial public issue. A. Pullman is the first chairman of directors. Qualification, £10.

ADVERTISE in this paper! It pays!!

Digitized by Google

SIMPOLE'S,

Complete Office & Library Furnishers.

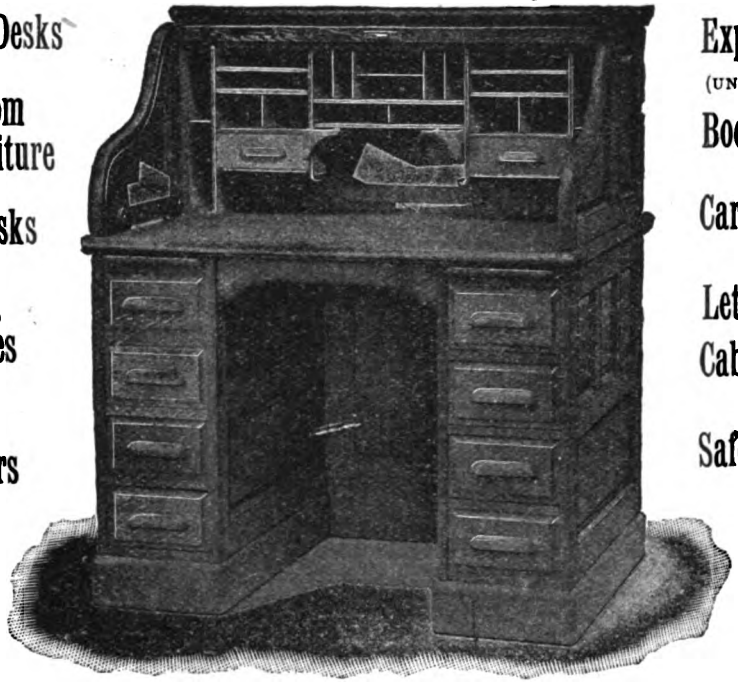
Roll Top Desks

Board Room Furniture

Clerks' Desks

Consulting Tables

Revolving Chairs



Expansion (UNIT SYSTEM) Bookcases

Card Index AND Letter Filing Cabinets.

Safes, &c.

ESTIMATES GIVEN.

INSPECTION INVITED.

Established 1844.

Telephone: No. 1847.

(Late Cathedral Steps), 36, DEANSGATE, MANCHESTER.

Remington Typewriter.

THE BUSINESS BUILDER.

(Write for Particulars).

100, GRACECHURCH STREET, LONDON, E.C.
263, OXFORD STREET, LONDON, W.

SKOTSELV CELLULOSEFABRIK,

SKOTSELVEN — NORWAY.

EASY-BLEACHING SULPHITE PULP.

Sole Agents for the United Kingdom:

Messrs. BECKER & Co., 64, Cannon Street, London, E.C.

Digitized by Google

Paper for Half-Tone Printing.

[illegible]

[illegible] Envelopes.

[illegible]

youngsters carrying a huge letter broadside between them, while above the letter are the words: "We're going to——." One shows a fisherman with pole on shoulder, passing a billboard, on the top of which is printed: "I'm going to drop a line to——," with space below for the address. Others show a red automobile with space for the address on the dashboard and the words: "I am to go to——;" a darkey dragging a little cart loaded with a big letter and saying, "Da's one for you——;" a clown by a sign board; a lady getting into a hansom, with the words, "Take me to——;" golfers "Making a drive for——," and so on. The idea is one that might be improved on, and the pictorial envelope made a rival of the pictorial post-card.

Objectionable Post-Cards.

The increasing popularity of the pictorial post-card, and the competition amongst shopkeepers to have something novel to offer their customers, has led to the introduction from the continent of a class of post-cards that, while not, perhaps, falling under the title of indecent, yet are exceedingly vulgar, and just [illegible] on indecency. In many retail shops in London and the suburbs these cards are openly exposed in the windows, and seem to be freely purchased by a certain section of the public. Messrs. Raphael Tuck and Sons wrote to us a few weeks ago on this subject, protesting against the introduction of such cards, and now the same firm send us a copy of a letter that they have received from a gentleman in Highbury, who writes as follows: "I regret to observe that the exhibition of indecent and obscene picture post-cards in shop windows has largely sprung up. There is a shop in this neighbourhood which particularly offends in this respect. It is a cruel shame that a delightful and instructive art, which your firm has been instrumental in bringing to such a high pitch of perfection, should have discredit thrown [illegible] these practices. Do you think [illegible] can be suggested, or [illegible] force against such [illegible] I should be pleased to help so [illegible] in my power to do so."

TARIFF CHANGES, &c.

UNITED STATES.

It has been decided that photographs [illegible] mounted on glass, bevelled [illegible] dutiable at the rate of 60 [illegible] under paragraph 100 [illegible] and not as photographs or [illegible] prints.

MEXICO.

According to the provisions of the new Mexican Customs Decree, post-cards of [illegible] dutiable at the rate of 40 [illegible] per legal kilo.

Digitized by Google

THE PAPERMAKERS' OPPORTUNITY!

Much has been said and written concerning the stationary condition of the Exports of British Paper. There are houses ready to do a larger export trade, and to secure increased orders no opportunity should be lost by Papermakers and Wholesale Stationers in bringing their names and specialties before

COLONIAL & FOREIGN BUYERS.

To do this effectively, no better medium presents itself than the "British and Colonial Printer and Stationer," Established in 1878. Its contents are keenly studied by Foreign and Colonial purchasers of Paper, Stationery, &c., and firms advertising in its pages may rely upon securing

GOOD BUSINESS.

From Sydney, N.S.W., Wm. Brooks, Printer and Stationer, writes:—"I read your paper with a great deal of interest, and there is no doubt that it is a paper which should be taken by every printer who wishes to keep himself in touch with developments in our line.

H. S. Cropper and Co., Nottingham, says:—"As a medium for advertising it is second to none."

THE LEADING JOURNAL.

Published EVERY THURSDAY.

Paper-makers, Wholesale Stationers, &c.

DESIROUS OF INCREASING THEIR HOME TRADE,
AND EXTENDING THEIR BUSINESS WITH . .

AUSTRALIA, NEW ZEALAND, INDIA, AFRICA, CANADA, &c.

SHOULD BOOK SPACE WITHOUT DELAY.

NEXT EXPORT ISSUE—including "BUYERS' GUIDE"—IN JUNE.

ADVERTISEMENT RATES on Application to

W. JOHN STONHILL & Co., 58, SHOE LANE, LONDON, E.C.

SUBSCRIPTION:

United Kingdom, 10s.; Colonial and Foreign, 12s. per Annum Post Free.

Digitized by Google

Is Electricity Profitable as Power FOR DRIVING MACHINERY?

It is hardly possible nowadays to read through a trade paper of any importance without seeing this question discussed, and it must be admitted that it has become of such great importance to manufacturers that no further apology is needed if this subject is considered again and again from any imaginable point of view. Competition in every branch of business is getting keener and keener, and if at the end of the financial year a manufacturer sees that his profits have not grown, or not increased in the same proportion as his turnover, or that he is left behind by his direct competitors, he is naturally anxious to find out where the fault lies. In many cases he will come to the conclusion that his machines are antiquated, and, if he is wise, he will lose no time in replacing them by more modern ones.

But very often the cause of his decreasing profits is to be found in the old-fashioned and expensive way his machinery is driven. How often do we find a manufacturer who has been running, for instance, a steam or gas engine for a score of years, and if you point out to him that the efficiency of such an old engine cannot possibly be the same as is the case with more modern engines, he will frequently tell you that he does not care to part with an old friend who has done him good services in the past. However laudable such sentiments are in private life, they certainly do not pay in business, where advantage should be taken of every new appliance that has proved to be time and money saving. If the manufacturer has come to the conclusion that his competitor is able to produce cheaper than himself, and that the fault lies with the engine which drives his machines, he is sometimes apt to adopt the same system as his competitor, but we contend he ought to go one better, and find out which system of driving by power is not only equal to his competitor's, with regard to economy, but superior from every point of view. And we contend that electricity offers such advantages that it is justly considered the best and cheapest power of the present day.

It is true, many manufacturers have had an unfortunate experience when they have adopted electricity as driving power, and in many cases have abandoned it after a short and costly trial. In such cases they will tell you that electricity as motive power does not pay. The reasons for failure are manifold, and we will briefly state the main causes why individual manufacturers may have been disappointed with the result:

(1) The electrical machinery or the wiring may have been defective, or both, the plant having been installed with a view to the smallest possible outlay. It needs hardly any argument that in such a case the manufacturer is bound to be dissatisfied with the results.

(2) He may have consulted an electrical engineer who had no practical knowledge of the machinery to be driven. Printers, for instance, will be well advised to have their electrical plants installed by electricians who work with papermakers' engineers, or who have at least a thorough knowledge of papermaking machinery.

(3) He may have found that his consumption of electricity is more costly than, for instance, steam which he generated himself, or than gas which he obtained from the gas supply company of his district.

With regard to this latter question, the opinions and experiences of makers are so different and contradictory to each other that it is evident there must be some good reason why one manufacturer should consider electricity extremely cheap and profitable, and another should find it very costly. To any man who is not blindly prejudiced, these contradictory experiences will easily be clear; they simply depend on the source from which he obtains the electric current.

If a manufacturer lives in a district where the electric supply company charges a low price, he naturally will find it very cheap, and *vice versa*. It seems strange, but it is a fact nevertheless, that the price of electrical energy does not only differ considerably in different parts of England, but also in London, where the unit of electricity costs as little as one penny in one district, and as much as sevenpence in another. What wonder then that one manufacturer should find electricity as driving power economical, and another manufacturer should find it costly?

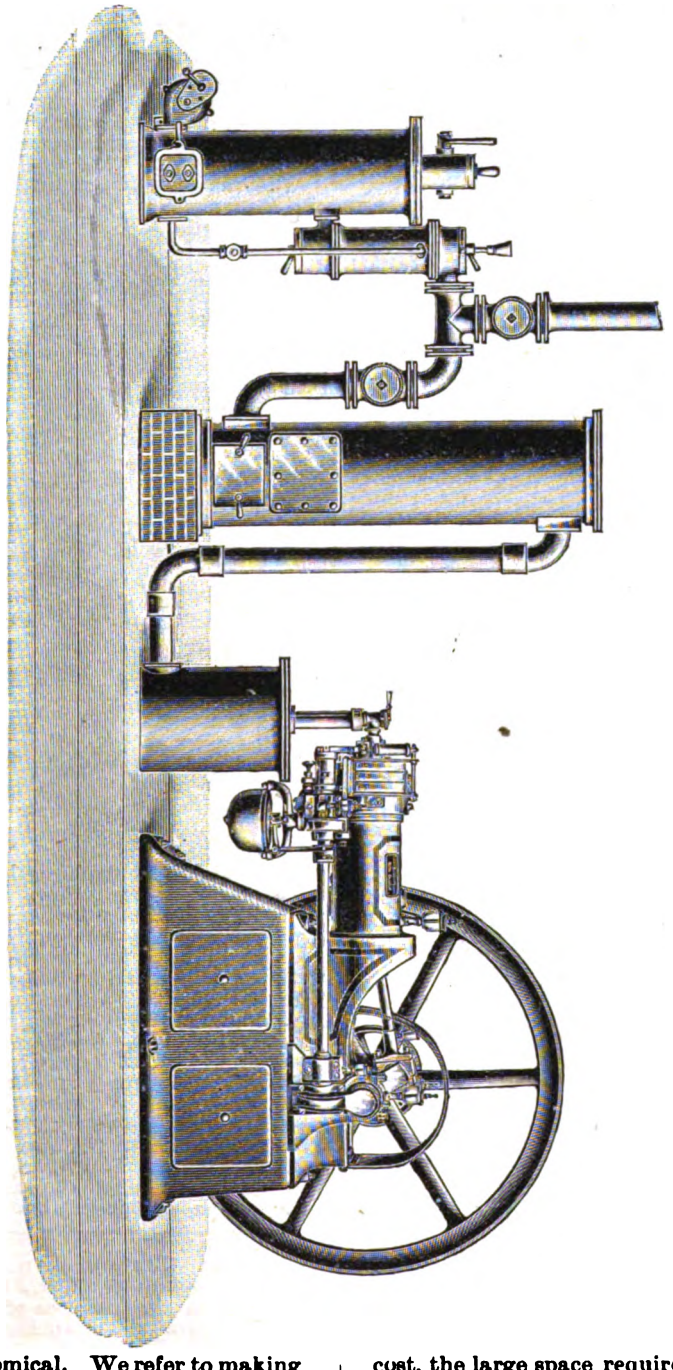
Of course in places where private companies supply electricity they try to make as big a profit as they can, as a rule charging big consumers much less per unit than small consumers have to pay. The same holds more or less good in districts where the vestry or corporation supply electric current; only in these cases the profits are usually credited to the taxes of the ratepayer, if this be any consolation to the consumer.

Apparently, the manufacturer who is charged a high rate for his electric power, is therefore at a disadvantage, and there are numerous instances where people do not take to electric driving for this reason. But have they not got the remedy in their own hands? Why do they not generate their electricity themselves? It is usually argued that only big firms can afford the luxury of generating their own electric current, on account of the very heavy outlay. Our answer is very simple: big manufacturers do not generate electricity for show purposes, but merely for reasons of economy, and at the same time we must contradict what we con-

Digitized by Google

sider a popular illusion that a very heavy outlay is required, provided the power consumer chooses a modern generating plant that has been proved to be extremely economical. We refer to making electricity from producer gas.

In itself this system is many years old, since it has been tried with more or less success in connection with "Dowson" gas. There were, however, many disadvantages connected with this system, especially with regard to the initial heavy cost, the large space required, and last—but not least—on account of the necessary gasometer, which is naturally dangerous, and would not be allowed in crowded



The "Schmitz" Gas Generating Plant.

197894B Digitized by Google

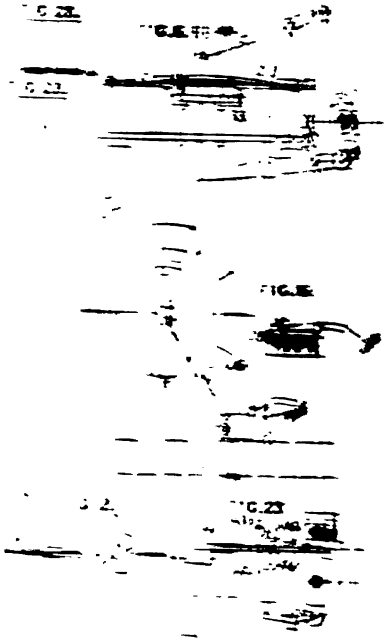
[illegible]

Paper Bag Machines.

In this [illegible]

[illegible]

[illegible] is [illegible] rotating rollers [illegible] and [illegible] the blades [illegible] shown in Fig. [illegible] the blades [illegible] carrying the blades. [illegible] which [illegible] shown in Fig. 23, then [illegible] device 108, Fig. 16, [illegible] a paste [illegible]



[illegible] the end of its stroke and the end of the [illegible] other. In moving to [illegible] the vertical one, the [illegible] which fit its mitred [illegible] the bag bottom, as [illegible] and then a V-shaped [illegible] moved across the mitre, [illegible] are pressed up[illegible] the diamond fold. The [illegible] next folded down by [illegible] wheel carrying the blades, [illegible] reaches the horizontal [illegible] drawn off the blade by re[illegible] 142, Fig. 23, and guided [illegible] 144. A blade 145 then [illegible] the last fold before [illegible] beneath the roller 146.

[illegible] LTD. — Registered [illegible] £2,000, in £1 shares, [illegible] business of lithographic [illegible] branches. No initial [illegible] first directors (to number [illegible] more than five) [illegible] qualification, five shares. [illegible] this paper! It pays!!

Digitized by Google

Rates for Advertisements on application to
W. JOHN STONHILL & Co.,
58, SHOE LANE, LONDON, E.C.

AT HOME AND ABROAD . . . THE

"Over 250 enquiries within a day or two of the advertisement appearing."—SAQUI AND LAWRENCE, London.

The World's Paper Trade Review

A WEEKLY JOURNAL FOR PAPER MAKERS & ENGINEERS.

[REGISTERED AT THE GENERAL POST OFFICE AS A NEWSPAER FOR TRANSMISSION IN THE UNITED KINGDOM.]

TWENTY-FIFTH YEAR.

VOLUME XLII. NUMBER 16. LONDON: APRIL 15, 1904. PRICE SIXPENCE EVERY FRIDAY.

Andrews & Co., Ltd.,

91, QUEEN VICTORIA STREET, LONDON,

And at MANCHESTER.

Telegrams:—"ARBORARIUS," London. Telephone:—835, Bank.

WOOD PULP AGENTS.

MAGO Finest Grade Moist Mechanicals, Hot and Cold Ground.

TOFTE Easy Bleaching Sulphite. (Except in Scotland).

TILSIT Extra Strong German Mitscherlich Sulphite

BÖHNSDALEN Sulphites, Strong News and Easy-Bleaching.

HAFSLUND SULFITFABRIK, Easy-Bleaching Sulphite.

WERMBOHLS FABRIKS AKTIEBOLAG, Easy-Bleaching and Strong Soda Pulps. (Except in Scotland).

GLOMMENS TRAESLIBERI, Hot-Ground and Extra Strong Moist Mechanical Pulp

SIDEROSTHEN Anti-Corrosive Paint.

Digitized by Google

A. WERTHEIM & Co.,

HAMBURG,

SUPPLY ALL KINDS OF

Sulphite,

Soda and

Mechanical

WOOD PULPS.

OFFICES AT:

CHRISTIANIA (Norway)	Kirkegaden No. 2.
GOTHENBURG (Sweden)	[illegible] Kirkegaden No. 2.
MANCHESTER	Guardian Buildings (opposite Exchange).
LONDON	72, Queen Victoria Street, E.C.
PARIS	Rue de Londres No. 23.
LYONS	3, Cours Lamoetta.
MILAN	2, Via Solferino.
TOLOSA (Spain)	8, Calle San Francisco.
ST. PETERSBURG	Kleine Podjatscheskaja No. 4, Qu. III.
NEW YORK	40, Nassau Street.

Telegraphic Address:

"WERTHEIM, HAMBURG."

Digitized by Google

The World's Paper Trade Review
A WEEKLY JOURNAL FOR PAPER MAKERS & ENGINEERS.

[REGISTERED AT THE GENERAL POST OFFICE AS A NEWSPAPER FOR TRANSMISSION IN THE UNITED KINGDOM.]

TWENTY-FIFTH YEAR.

VOLUME XLII. NUMBER 16. LONDON: APRIL 15, 1904. PRICE SIXPENCE, EVERY FRIDAY.

AMALGAMATED Society of Papermakers.

ANNUAL MEETING.

The above society's successful career is largely owing to the absence of any agressive spirit, and the desire to work in harmonious relations with employers. That the business of the society is conducted on straightforward principles and business lines was fully demonstrated on the occasion of the annual meeting, held on Saturday last, at the Angus Hotel, New Bridge-street, London, E.C. The chair was occupied by Mr. George Taylor, of Darwen, and the vice-chair by Mr. Herbert West, of Sittingbourne, there being present Mr. Wm. Dyson (secretary), Mr. Chas. Howard (treasurer), and the following delegates:—Messrs. John Ryan, Charles Clarke, William Rogers, H. J. Freeman, Frank Hitchen, Thomas Dyer, Stephen O'Flaherty, William Southcott, William Young, and C. Walters. There were also in attendance several members of the society, and a representative of the *World's Paper Trade Review*.

New Members.

The SECRETARY having read the minutes of the previous meeting, which were confirmed, consideration was given to candidates for admittance to the society. The following names were submitted to the meeting and accepted as members:—Mark Maddick, Richard Hales, John Edwards, Alexander Nicol, Herbert Friend, George J. Lyddon, George House, Richard Hefford, William Moore, Frank Hollands, Thomas Foot, Arthur Henry Taylor, William Pears, Frederick Geo. Groombridge, and Frederic Fermor.

Mills to Send Delegates to Next Annual Meeting.

The CHAIRMAN said the next business was the selection of mills to send delegates to the annual meeting. After some discussion the mills agreed to were the *Daily Chronicle*, Tovil, and Riverside.

Finance and Membership.

The SECRETARY then referred to the financial statement for the year, signed by the auditors, Messrs. Herbert Edward West and George Taylor. The total value of the Society amounted to £5,630, there being £2,664 in Post Office Savings Bank and £2,500 in Bredbury and Romiley District Council. The treasurer had in hand £396 14s., the balance being covered by office furniture (£27 14s.) and loans to members (£41 13s.). The membership of the Society showed a gain of 44 during the year, there being 88 new members, whilst 44 old members were off the books.

Mr. MARTIN made a suggestion that it would perhaps be more convenient if the accounts were audited prior to the meeting.

Mr. HOWARD said that course was usually adopted; the present occasion was an exception.

It was explained that in adopting [illegible] course they had a saving was effected, [illegible] was not deemed necessary for the aud[illegible]

Digitized by Google

from Sittingbourne to make a journey north. The meeting expressed its appreciation of the careful manner in which the audit had been carried out.

The Labour Representation Committee.

The CHAIRMAN said the next item on the agenda was the recommendation from the Birmingham meeting, held June 27th, 1903, that the society join the Labour Representation Committee. He said the matter had been before them sometime, and it was one that demanded full consideration. They must view the question from the standpoint of the trade unionist, and put politics on one side. He invited the views of the delegates.

The SECRETARY, in mentioning the reason why the question had been brought forward, said the law affecting trades union was unsatisfactory. If they joined the Labour Representation Committee it did not follow that they were bound to take any active part, and he, personally, thought it would be as well not to do so. As trades unionists they were bound to admit that the Labour Representation Committee were putting forth their best efforts to improve their position. In the event of any dispute, they at least should have equal rights with employers; they did not want more. He thought the Society should pay its share to the Labour Representation Committee, if they looked to share in the benefits. There were many who looked at the matter from a political view, but it was not a party question. Legislation was for the purpose of legalising of peaceful picketing, amendment of law of conspiracy, and protection of trade union funds. He referred to the Taff Vale case, which resulted in £23,000 damages, and £27,500 in law costs, and also gave other instances to show the necessity of an amendment of present laws, in order to place them on the same footing as employers. If a fight should take place, and he hoped such a contingency would long be avoided, they could hardly expect any help from the Labour Representation Committee if they refrained from giving their support.

The CHAIRMAN said personally he was in favour of joining the committee.

The proposal, it seems, has been before various mills for some time. Support was given at meetings held at Blackburn and Bury. A meeting at Birmingham decided against the society joining. According to letters read by the Secretary, Burnley Mill was favourable, but Stowford Mill questioned the wisdom of incurring any unknown expense.

A MEMBER said he had belonged to the society for 20 years, and had always advocated combination. He favoured a general federal fund, in order to support the demands of workers and improve their conditions. In joining the Labour Representative Committee he asked whether it was a progressive step? He felt that it would be impossible for labour to make its influence felt in the House of Commons for the next ten years. If they got a Radical ——

The SECRETARY protested against the introduction of politics.

Continuing, the speaker said the matter was parliamentary. He thought every effort should be made to bring about a solution of the great questions affecting labour. He supported the proposal of joining the Labour Representation Committee.

Mr. MARTIN referred to the existence of the Employers' Parliamentary Council, and thought labour should be equally represented. He hoped the Society would become allied to the Labour Representation Committee.

The SECRETARY said there were about thirteen labour members in the House of Commons, and probably at the next election the number would be multiplied by three. In the event of any close majority of either political party, labour influence would not be immaterial.

The CHAIRMAN said the majority seemed to be in favour of the Society joining the Labour Representation Committee, and upon putting to the meeting the motion—proposed by Mr. CLARKE, and seconded by Mr. WEST —"that the recommendation from the Birmingham meeting be agreed to," twelve voted for and one against.

Proposed International Congress of Papermakers.

The Society having been invited by the Austrian Federation of Papermakers to take part in an International Congress of Papermakers proposed to be held in Belgium in July or August, the meeting considered the question of sending a delegate thereto.

The SECRETARY said that with the exception of the United States, the English papermakers were better off in regard to the conditions of labour than workers in other countries. As long as our markets were open, however, the conditions of labour prevailing on the continent were of importance to them. Much of the paper no doubt was produced by "sweated" labour, and if they could assist in raising the status of foreign workers they would in a measure be improving their own position. If the foreigner paid the same rate of wages, and worked under corresponding conditions as prevailed in this country, both employers and workers would be able to compete under fairer conditions. If they went into the question, he thought it also a matter for consideration on the part of the Papermakers' Association, which might feel inclined to join them. It was a question as to the benefit the Society would receive.

The CHAIRMAN said they must look to the probable cost of sending a delegate to Belgium, and also if any influence could be brought to bear in advancing the objects of the conference,

The SECRETARY estimated the expense at about £10. He read a letter he had received from the secretary of the Austrian Federation of Papermakers, stating that the proposed conference was for receiving information as to wages and working hours in different countries, and also to support an eight hour day and no Sunday labour. The Secretary said he had received a letter from Burnley opposing the sending of a delegate.

A resolution to the effect that a delegate

Digitized by Google

be not sent to the proposed conference was unanimously agreed to.

Ex-Members and Unpaid Loans.

An item on the agenda was:—"Loans owing by those who have left the society, shall we cross them off the report." Several delegates thought that strong measures should be adopted in order to obtain repayment of loans. It was pointed out that in some cases men in full employment made no attempt to meet their obligations. In one or two instances, however, members who had borrowed £1 or so from the society had died, and consequently the society had benefited in not having to pay the £10 death money to relatives. It was subsequently agreed that names (except those who had died) of borrowers be retained, but that the sums be not shown. The suggestion of the secretary that the total value of the society be given above the list of ex-members was agreed to.

The Tariff Commission.

The Secretary said that he had received a letter from the Tariff Commission, signed by W. A. S. Hewins, secretary, asking for data and opinions as to the conditions of British trade, according to the experience of the society. A list of questions was enclosed, which he (the secretary) read as follows:—

(1) What trade or industry does your Society represent?
(2) To what district or districts do the operations of your Society extend?
(3) What was your membership at the end of 1903, and, if you can, please state what proportion this number bears to the total employed in your trade or industry in the districts referred to in Question 2?
(4) What was the number of unemployed members of your Society during the last five years, and what was the average period during which they were unemployed?
(5) During what number of hours are workmen in your district and trade employed in a full working week?
(6) To what extent, if any, have your members been employed at less than full time in 1903? Please give particulars.
(7) Has the importation of foreign-made goods into British markets affected the conditions of employment in your trade? Please give particulars.
(8) Has the influx of aliens affected the conditions of employment in your trade? Please give particulars.
(9) Have any other causes thrown any considerable number of your members wholly or partially out of employment? If so, please give particulars.
(10) Has any appreciable number of your members left this country in recent years? If so, why? And state as far as you can to what countries they have emigrated.
(11) Has lack of employment caused an appreciable number of your members to leave your trade for any other occupation at home? If so, please give particulars.
(12) Please state whether you would be willing to furnish to the Commission any further detailed information, and, if so, on what subjects?

The Secretary asked whether he was to fill in answers to the questions? He believed that about 33,000 tons of foreign paper were received monthly into this country, and as it took £2 5s. to make a ton of paper, it followed that £75,000 was lost in wages owing to foreign imports. He thought they ought to give answers to the questions put before them.

A resolution was unanimously agreed to that Mr. Dyson, on behalf of the society, reply to the questions submitted by the Tariff Commission.

It was decided to hold the next meeting of the society at Manchester, and there being no other business of importance, the proceedings terminated with a hearty vote of thanks to the chairman and vice-chairman.

Exports of British Paper.

The following returns show the exports of British paper during the week ended Saturday last:—

From London.

Printings.—To Australia, 193 cwts.; Africa, 52 cwts.; Belgium, 131 cwts.; B. W. Indies, 10 cwts.; Cape, 35 cwts.; China, 188 cwts.; Egypt, 3 cwts.; France, 112 cwts.; Germany, 79 cwts.; Greece, 97 cwts.; Holland, 63 cwts.; India, 813 cwts.; Mauritius, 85 cwts.; New Zealand, 297 cwts.; Sweden, 86 cwts.; United States, 108 cwts.

Writings.—To Australia, 231 cwts.; Africa, 118 cwts.; Argentine, 136 cwts.; Belgium, 19 cwts.; Brazil, 1 cwt.; Cape, 35 cwts.; China, 107 cwts.; France, 38 cwts.; Germany, 102 cwts.; Greece, 9 cwts.; Holland, 5 cwts.; India, 447 cwts.; Japan, 16 cwts.; Mauritius, 4 cwts.; New Zealand, 271 cwts.; Port Said, 3 cwts.; Spain, 22 cwts.; United States, 32 cwts.; W. Indies, 117 cwts.

Other Kinds.—To Australia, 833 cwts.; Africa, 272 cwts.; Belgium, 31 cwts.; Brazil, 5 cwts.; Cape, 331 cwts.; China, 105 cwts.; Canada, 133 cwts.; Channel Islands, 33 cwts.; Egypt, 25 cwts.; France, 150 cwts.; Germany, 55 cwts.; Holland, 5 cwts.; India, 343 cwts.; Japan, 32 cwts.; New Zealand, 471 cwts.; Sweden, 43 cwts.

From Glasgow.

Printings.—To Cape, 64 cwts.; Canada, 551 cwts.; China, 366 cwts.; Japan, 793 cwts.; New Zealand, 236 cwts.

Writings.—To Canada, 42 cwts.; France, 46 cwts.; India, 27 cwts.; Japan, 18 cwts.

Other Kinds.—To New Zealand, 50 cwts.

As a medium for all classes of advertisements the *World's Paper Trade Review* excels. It stands ahead of all contemporaries.

Good advertising is the pathfinder for all who seek success in business.—*Printers' Ink*

Digitized by Google

EXPORTS OF BRITISH PAPER.

The exports of British paper during March and also January-March of this and the two preceding years were:—

TOTAL EXPORTS.

Mar.,	1904	105,127 cwts.	£101,805
,,	1903	91,844 ,,	143,736
,,	1902	76,633 ,,	124,292
Jan.-Mar.,	1904	304,463 ,,	469,581
,,	1903	281,412 ,,	436,671
,,	1902	232,162 ,,	373,435

Official classification:—

WRITINGS, PRINTINGS AND ENVELOPES.

Exports during March:—

	1902. Cwts.	1903. Cwts.	1904. Cwts.
France	4,508	5,619	5,525
United States ...	1,197	1,699	810
B. South Africa	8,436	10,410	12,691
B. East Indies...	9,507	11,389	12,712
Australia ...	11,919	13,234	16,160
New Zealand ...	3,130	6,274	6,610
Canada	606	1,602	2,632
Other Countries	11,650	15,978	11,260
Totals	51,052	65,605	68,400

	1902. £	1903. £	1904. £
France	7,264	7,092	8,151
United States ...	2,414	2,914	1,657
B. South Africa	12,542	17,668	16,288
B. East Indies ...	13,072	15,358	16,442
Australia ...	16,249	14,794	20,255
New Zealand ...	4,488	7,586	8,678
Canada	1,263	2,352	3,588
Other Countries	20,251	25,180	22,838
Totals	77,543	93,544	97,897

Exports during January-March:—

	1902. Cwts.	1903. Cwts.	1904. Cwts.
France	15,521	17,251	14,160
United States ...	4,611	3,552	2,420
B. South Africa	26,241	38,420	31,882
B. East Indies ...	31,411	29,944	40,239
Australia ...	33,686	43,191	49,444
New Zealand ...	10,349	17,258	19,383
Canada	1,981	5,688	8,350
Other Countries	33,957	43,434	39,178
Totals	157,757	198,738	205,056

	1902. £	1903. £	1904. £
France	22,663	23,902	21,226
United States ...	9,520	8,802	6,156
B. South Africa	36,941	59,791	41,823
B. East Indies...	42,658	41,919	51,375
Australia ...	44,763	54,083	61,616
New Zealand ...	14,777	22,532	26,555
Canada	4,075	8,553	11,580
Other Countries	60,541	68,945	72,186
Totals	235,938	288,530	295,517

HANGINGS.

Mar.,	1904	10,089 cwts.	£23,890
,,	1903	7,815 ,,	21,832
,,	1902	8,699 ,,	21,184
Jan.-Mar.,	1904	26,453 ,,	70,075
,,	1903	22,149 ,,	64,429
,,	1902	21,501 ,,	57,091

BAGS.

Mar.,	1904	1,888 cwts.	£1,988
,,	1903	2,715 ,,	2,551
,,	1902	1,947 ,,	1,742
Jan.-Mar.,	1904	7,083 ,,	7,256
,,	1903	8,630 ,,	8,107
,,	1902	6,207 ,,	5,764

OTHER DESCRIPTIONS.

Exports during March:—

	1902. Cwts.	1903. Cwts.	1904. Cwts.
France	562	644	1,003
United States ...	745	726	1,012
South Africa ...	4,472	3,670	3,418
East Indies ...	1,497	1,613	5,345
Australia ...	2,261	2,453	5,856
New Zealand ...	471	531	823
Canada	348	412	451
Other Countries	4,609	5,680	6,842
Totals	14,965	15,709	24,750

	1902. £	1903. £	1904. £
France	2,304	3,219	3,366
United States ...	1,881	2,310	3,400
B. South Africa	4,349	4,987	3,836
B. East Indies ...	1,887	2,063	6,492
Australia ...	3,350	3,075	7,278
New Zealand ...	636	599	1,224
Canada	1,163	1,024	1,179
Other Countries	8,253	8,532	11,255
Totals	23,823	25,809	38,030

Exports during January-March:—

	1902. Cwts.	1903. Cwts.	1904. Cwts.
France	1,628	1,645	2,857
United States ...	1,976	2,207	3,802
B. South Africa	13,283	13,845	10,716
B. East Indies...	5,416	7,952	10,570
Australia ...	8,931	9,269	15,136
New Zealand ...	1,847	1,872	3,750
Canada	688	781	1,130
Other Countries	12,928	14,324	17,910
Totals	46,697	51,895	65,871

	1902. £	1903. £	1904. £
France	7,258	7,392	9,237
United States ...	5,604	5,547	8,443
South Africa ...	13,559	15,720	12,267
East Indies ...	7,064	8,900	13,140
Australia ...	13,645	10,925	17,996
New Zealand ...	2,371	2,324	4,212
Canada	1,991	2,061	2,950
Other Countries	23,150	22,736	28,488
Totals	74,642	75,605	96,733

Digitized by Google

SIMPOLE'S,

Complete Office & Library Furnishers.

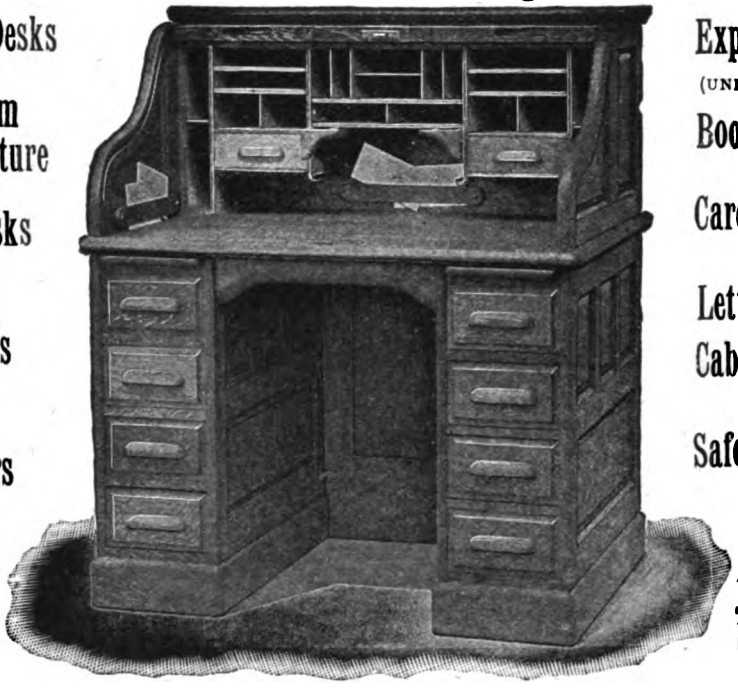
Roll Top Desks

Board Room Furniture

Clerks' Desks

Consulting Tables

Revolving Chairs



Expansion (UNIT SYSTEM) Bookcases

Card Index AND Letter Filing Cabinets.

Safes, &c.

ESTIMATES GIVEN.

INSPECTION INVITED.

Established 1844.

Telephone: No. 1847.

(Late Cathedral Steps), 36, DEANSGATE, MANCHESTER.

DR. C. WURSTER'S PATENTED Pulping Engines & Kneaders NEARLY 80 AT WORK.

LARGE PATTERN—THREE SIZES.

PULPING-UP 3, 6, and 9 TONS of Dry Papers or Pulp in 24 hours.
Power:—5-h.p., 8-h.p., and 12-h.p. Prices:—£125, £150, and £200.

SMALLER PATTERN—For Clean Papers only.

PULPING-UP HALF-A-TON to ONE TON of Dry Paper in 24 hours. 2 to 4-h.p.
Built in Iron, £75, £90, and £100.

For Better Quality Papers, Trough and Propellers made of Brass:—£100, £125, & £150.

Special Machines for Unsorted Paper.

These Machines do not grind, cut up, or wet the fibres, and, as the state of beating and refining is unaltered, neither colour nor sizing being affected, and impurities not touched, "Broke" can be re-used for the same quality of paper again.

For Particulars apply to **Dr. C. WURSTER,** 29, Abbey Road, St. John's Wood, LONDON, N.W.

Remington Typewriter.

THE BUSINESS BUILDER.

(Write for Particulars).

100, GRACECHURCH STREET, LONDON, E.C.
253, OXFORD STREET, LONDON, W.

Digitized by Google

FOREIGN PAPER IN GREAT BRITAIN.

The total imports of foreign paper, boards, etc., during March and January-March of this and the two preceding years were as under:—

TOTAL IMPORTS.

Mar.,	1904	673,334	cwts.	£455,914
,,	1903	655,472	,,	430,695
,,	1902	552,393	,,	367,769
Jan.-Mar.,	1904	1,780,882	,,	1,218,212
,,	1903	1,820,175	,,	1,221,515
,,	1902	1,552,926	,,	1,086,925

The following is the official classification of paper, etc.:—

UNPRINTED.

Mar.,	1904	385,444	cwts.	£311,073
,,	1903	371,595	,,	291,087
,,	1902	306,142	,,	216,086
Jan.-Mar.,	1904	1,080,488	,,	853,108
,,	1903	985,453	,,	809,303
,,	1902	901,698	,,	744,558

"ON REELS."

March imports:—

	1902. Cwts.	1903. Cwts.	1904. Cwts.
Sweden	28,342	47,874	44,712
Norway	30,557	30,151	35,917
Germany ...	3,323	6,194	12,928
Holland	6,897	6,981	5,021
Belgium... ...	794	778	528
United States ...	30,704	25,546	9,808
Other countries	6,950	4,943	9,243
Totals... ...	107,567	122,467	118,157

	1902. £	1903. £	1904. £
Sweden	15,940	31,963	31,440
Norway	19,023	19,220	22,890
Germany ...	2,630	4,934	7,297
Holland	5,982	6,923	4,814
Belgium... ...	690	735	442
United States ...	17,494	14,617	5,263
Other countries	4,713	2,847	5,739
Totals... ...	66,472	81,239	77,885

January-March imports:—

	1902. Cwts.	1903. Cwts.	1904. Cwts.
Sweden	83,915	99,553	120,318
Norway	80,617	80,736	83,537
Germany ...	12,400	15,045	29,723
Holland	18,086	19,618	14,117
Belgium... ...	2,648	1,869	2,446
United States ...	70,859	59,979	57,130
Other Countries	22,292	17,153	23,519
Totals... ...	290,817	293,953	330,790

	1902. £	1903. £	1904. £
Sweden	48,906	67,527	79,811
Norway	51,480	53,142	52,655
Germany ...	12,034	11,960	18,070
Holland	16,014	17,117	11,939
Belgium... ...	3,452	2,376	2,589
United States ...	41,565	34,710	32,063
Other Countries	15,623	11,409	15,332
Totals	189,074	198,241	212,459

NOT "ON REELS."

March imports:—

	1902. Cwts.	1903. Cwts.	1904. Cwts.
Sweden	46,296	72,476	72,291
Norway	50,429	48,371	60,342
Germany ...	19,644	27,969	27,927
Holland	31,290	41,473	41,618
Belgium	21,361	20,437	27,967
United States ...	5,324	12,258	13,223
Other countries	24,231	26,114	23,919
Totals ...	198,575	249,128	267,287

	1902. £	1903. £	1904. £
Sweden	34,253	49,100	52,355
Norway	35,416	33,296	40,384
Germany ...	20,043	28,476	27,765
Holland	32,225	37,418	37,310
Belgium... ...	22,550	21,996	33,526
United States ...	7,103	11,337	14,745
Other countries	28,094	28,205	27,073
Totals... ...	179,614	209,828	233,188

January-March imports:—

	1902. Cwts.	1903. Cwts.	1904. Cwts.
Sweden	139,074	175,778	187,801
Norway	154,716	128,823	176,467
Germany ...	69,860	84,915	80,729
Holland	101,022	134,995	130,467
Belgium... ...	55,523	65,265	74,556
United States ...	30,729	29,523	33,510
Other countries	59,957	72,201	66,168
Totals... ...	610,881	691,500	749,698

	1902. £	1903. £	1904. £
Sweden	98,673	121,130	133,528
Norway	113,434	87,326	117,169
Germany ...	67,702	84,530	80,304
Holland	104,996	123,052	116,225
Belgium... ...	61,097	71,044	81,865
United States ...	33,095	39,352	34,077
Other countries	76,577	84,628	77,481
Totals... ...	555,484	611,062	640,649

PRINTED.

March imports:—

	1902. Cwts.	1903. Cwts.	1904. Cwts.
Germany ...	2,517	2,804	2,956
Holland ...	1,215	1,505	2,186
Belgium... ...	6,010	8,233	7,531
France	579	678	1,022
United States ...	3,047	1,219	2,583
Other countries	122	224	149
Totals... ...	13,490	14,663	16,227

Digitized by Google

PRINTED.

March imports :—

	1902. £	1903. £	1904. £
Germany ...	6,058	7,909	8,414
Holland	5,704	5,873	10,568
Belgium... ...	16,890	25,269	18,044
France	2,940	2,990	4,100
United States ...	6,370	2,987	5,596
Other countries	362	609	517
Totals	38,324	45,637	47,239

January-March imports :—

	1902. Cwts.	1903. Cwts.	1904. Cwts.
Germany ...	8,388	8,650	8,852
Holland	4,678	5,016	6,024
Belgium... ...	16,967	22,727	22,431
France	2,110	1,918	2,892
United States ...	7,616	3,730	5,406
Other countries	620	651	668
Totals	40,379	42,692	46,333

	1902. £	1903. £	1904. £
Germany ...	21,761	22,680	25,619
Holland	15,692	22,090	27,664
Belgium... ...	46,736	66,089	53,822
France	10,907	9,380	12,034
United States ...	17,408	8,143	12,148
Other countries	1,503	1,933	2,290
Totals	114,007	130,765	133,577

STRAW, MILL, and WOOD PULP BOARDS.

Mar.,	1904	271,663 cwts.	£97,602
,,	1903	269,214 ,,	93,991
,,	1902	232,761 ,,	83,359
Jan.-Mar.,	1904	654,061 ,,	231,527
,,	1903	792,030 ,,	281,447
,,	1902	610,849 ,,	228,360

British Re-Exports of Foreign Paper.

The total re-exports of paper, etc., during March and also January-March of this and of the two preceding years stand as under :—

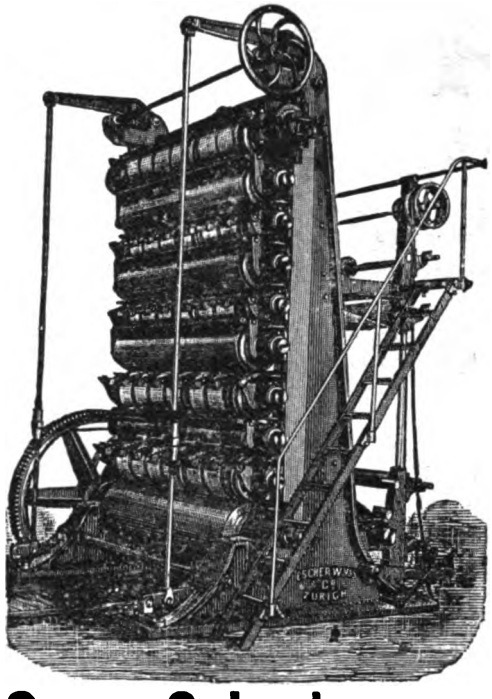
Mar.,	1904	14,910 cwts.	£11,580
,,	1903	19,412 ,,	14,573
,,	1902	3,864 ,,	4,801
Jan.-Mar.,	1904	41,512 ,,	32,888
,,	1903	35,964 ,,	31,394
,,	1902	22,703 ,,	23,515

AMERICAN IMPORTS OF CHEMICALS.—Chemicals were imported into the United States during February as follows :—Bleaching powder, 4,870,105 lbs. of the value of 39,183 dols. ; caustic soda, 149,307 lbs., 3,603 dols. ; sal soda, 197,200 lbs., 1,071 dols. ; soda ash, 1,396,842 lbs., 12,624 dols. ; brimstone (free), 10,245 tons, 200,285 dols. For the eight months ended February the receipts were:—Bleaching powder, 71,653,989 lbs., 547,634 dols.; caustic soda, 1,999,633 lbs., 49,591 dols. ; sal soda, 2,137,123 lbs., 12,011 dols. ; soda ash, 13,692,098 lbs., 125,810 dols.; brimstone, 109,731 tons, 2,086,468 dols.

ESCHER WYSS & CO.,

Engineers,

ZURICH, SWITZERLAND.



Super Calenders and Friction Calenders

OF ANY WIDTH.

Sole Agent for the U. K.—

ALPH. STEIGER, C.E.,

28, VICTORIA STREET, LONDON, S.W.

Wilh. MUNDS,

DRESDEN, SAXONY.

REPRESENTATIVE for 15 FACTORIES

CENTRAL OFFICE for the SALE of

Sulphito, Sulphate, Soda

and STRAW PULPS,

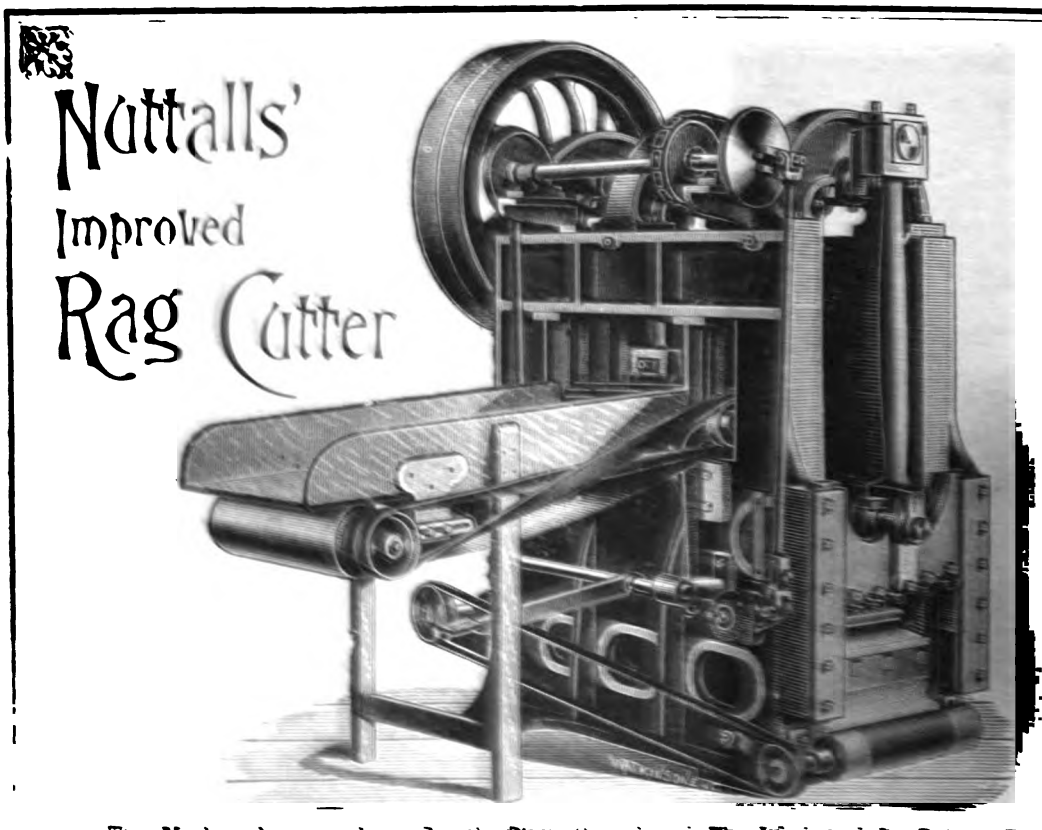
Bleached and Unbleached,
All Qualities and all Processes.

Digitized by Google

BENTLEY

Papermak

BURY, ne


Nuttalls'
Improved
Rag Cutter

[illegible] Strengthened and Simplified and its Output Cap[illegible] [illegible] Equally Effective [illegible] the Strongest and Lightest Materials and wil[illegible] [illegible] Class of Stock

Sole British Makers of

NO WELL EQUIPPED

FULL PARTICUL

Digitized by Google

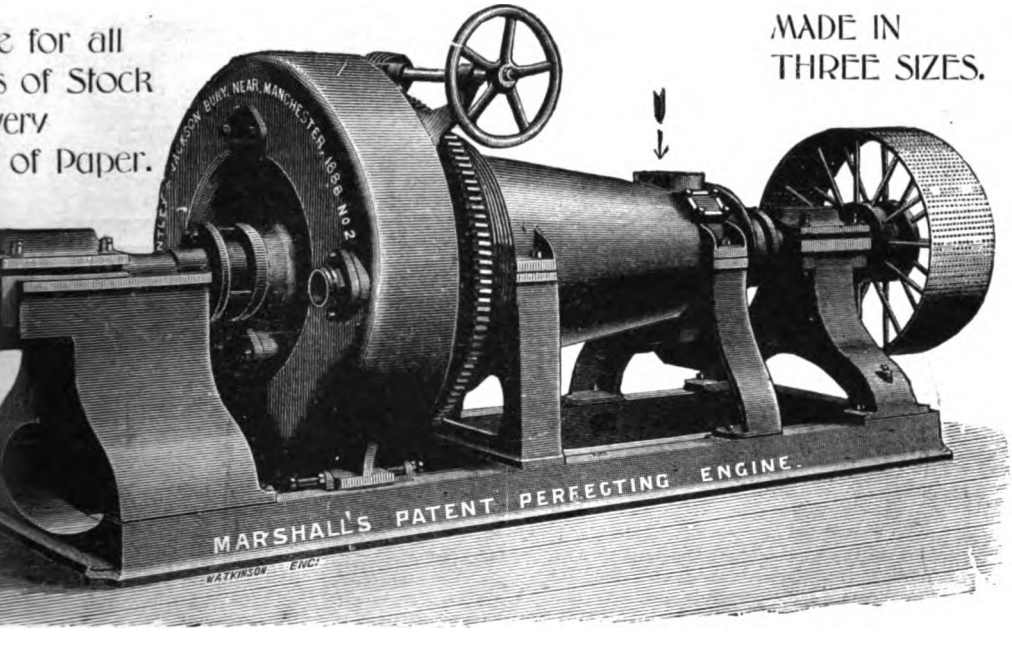
JACKSON
LIMITED.

gineers,
ANCHESTER.

larshall's PATENT Perfecting Engine

e for all
s of Stock
very
of Paper.

MADE IN
THREE SIZES.



Engine will produce a Better Finished, Stronger, and More Even Sheet of Paper from same Materials than can be produced by any other Mechanical Process, and at the same time will REDUCE the TIME and POWER Required for Beating.

BURN-TAYLOR Machine.

SHOULD BE WITHOUT.

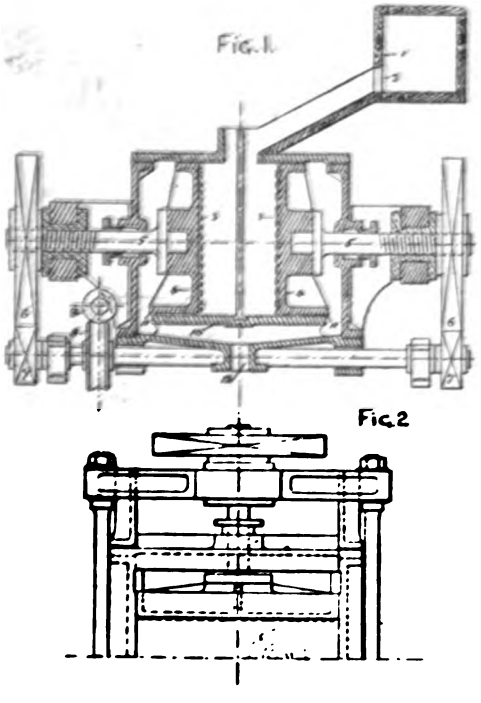
APPLICATION.

Digitized by Google

The Manufacture of Boards.

A British patent has been granted to Messrs. F. L. Roeckner and W. J. Norris relating to an apparatus for manufacturing sheets or boards of any thickness from paper pulp whereby the quantity of water required may be reduced and use of felts dispensed with, and when desired of firmly incorporating or combining in the body of the board wire netting, wire gauze, perforated or expanded metal.

Fig. 1 shows a section and Fig. 2 half plan with cover removed of a small machine, (1) being a trough by which the pulp is conveyed to the machine, the supply being cut off by a door or slide at (2), the dotted lines



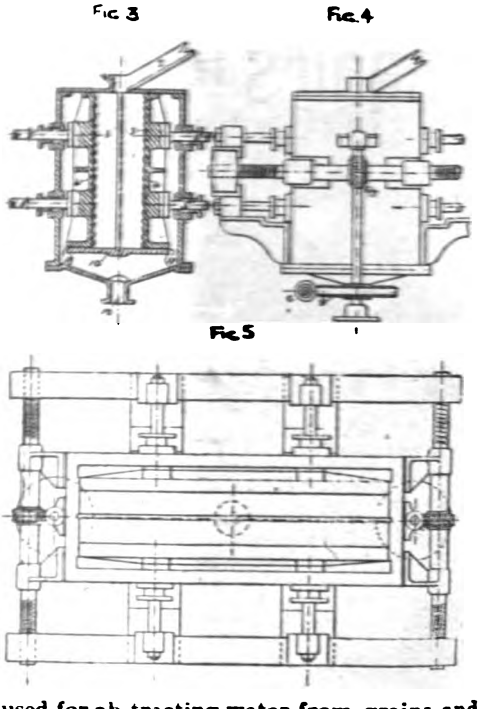
(3) show the gauze wire strainers and (4) the pressing plates, the grooves in face of same being shown by small semicircles, (5) the screws which are actuated by the spur wheels (6) driven by the pinions (7) which are turned by the worm wheel (8) driven by the worm (9), which may be operated by hand or power. The pressing plates (4) slide on the false bottom (10), the water escaping by the grooves (11) into the space between the false bottom and bottom of the machine, and is drawn off through outlet pipe (12) to which the pump, or suction pipe where a series of machines is used is connected, with valve or cock to same if desired.

Fig. 3 is a section of a machine of larger size, Fig. 4 an end view, and Fig. 5 plan with cover removed, in which more than one pair of screws are used, the gearing for actuating same being arranged to suit.

Fig. 6 shows in section machine arranged for making bowls, and by modification for making balls and similar articles.

Fig. 7 shows in section machine arranged for making pipes or half pipes, and Fig. 8 half plan of same with cover removed, (13) being a strong metal pipe perforated and covered with wire gauze, or if perforated with fine holes the wire gauze may be dispensed with; this core rests in a pocket at each end of the machine into which the water in the core when pressing the pulp falls, the pockets at bottom being open to the space between false bottom and bottom of the machine. When required to make half pipes or semicircular sheets a parting plate is fitted to top and bottom of this core.

Machines as shown by Figs. 1—5 may be



used for abstracting water from grains and the like, peat, or fibrous material generally, and to which purpose the patentees propose to apply them as well as for making sheets, etc., from paper pulp.

The Esparto Trade.

Messrs. Ide and Christie, in their monthly circular, dated April 15th, report as follows:—The March import, though less than the previous two months, has been equal to the estimated consumption and was well distributed over the various ports of entry. The record for the quarter compares favour-

Digitized by Google

ably with that of the previous two years, and the moderate rates of freight at which steamers were obtainable doubtless contributed largely to this result. The market enquiry for new contracts has tended to diminish, except from those buyers who somewhat unduly delayed negotiation for comparatively early delivery and whose belated operations have enabled sellers to command advanced prices for this position. Shipments over the second half of the year, and beyond, have been in less request, and while sellers maintain their quotations with moderate firmness, negotiations are inclined to drag for the present. The condition of the local market in Tripoli has not improved, supplies being reported as extremely small in spite of the extraordinary prices paid by

Fig 6

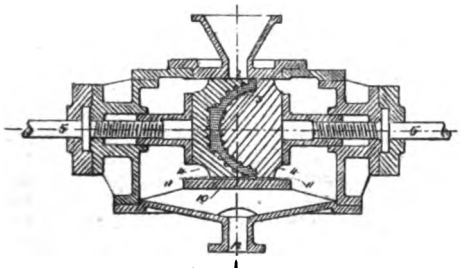


Fig 7

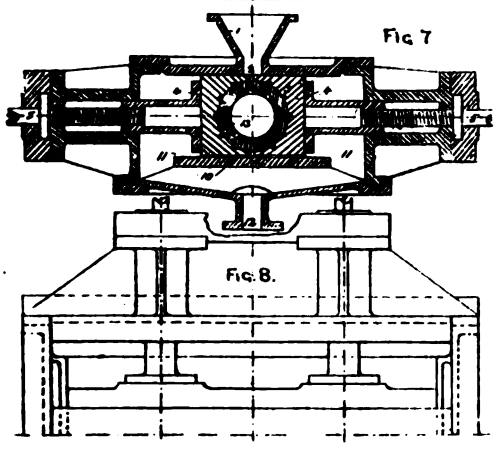


Fig. 8.

balers to the native collectors. Steamer transport has been fairly abundant from all esparto ports homewards, and charterers who have cargoes ready for shipment have had little difficulty in securing tonnage.

Spanish has been received in moderately full quantity in liquidation of contract engagements, but the figures for the quarter, 12,937 tons, have been rather less than last year, which showed an import of 14,172 over the same period. There has been a certain amount of enquiry for new season's esparto, but no extent of business has yet been negotiated, so that quotations remain nominally unaltered.

Algerian arrivals have been again large, and the total import for the year 20,868 tons, thus showing a material increase over the first quarter of 1903, which amounted to 16,415. Firmness has been imparted to quotations by the demand for prompt and comparatively early cargoes to which some sellers found themselves unable to respond, owing to Algerian railway transport being disorganised by floods and the necessity of providing for contracted shipments. The business in new crop for late summer and onwards has been limited as buyers are not prepared to concede the prices nominally current for distant delivery.

Tunisian has been received in full quantity and the figures for the quarter, 7,459 tons, approach closely to those of last year, which showed 7,671. The demand for distant shipments has slackened, but one or two parcels for early loading have been sold at full prices, and the quotation for other positions has been firm in sympathy. The situation at the foreign ports has lately somewhat improved by an increase of supplies.

Tripoli last month was represented by one small parcel to the Wear, increasing the receipts of the quarter to 11,038 tons, against 7,750 in 1903. A small trade has been passing for shipments down to the end of the year at sellers' quotations, but the condition of the foreign market discourages shippers as stocks there are meagre and supplies do not respond to the very extreme prices ruling day by day.

The following is an official summary of esparto arrivals at all U.K. ports during past month:—

London	710 tons	Bristol	700 tons
Preston	865 ,,	Fleetwood ...	968 ,,
Greenock	1,517 ,,	Glasgow	996 ,,
Aberdeen ...	685 ,,	Dundee	773 ,,
Kirkcaldy ...	1,459 ,,	Grangemouth ...	1,535 ,,
Bo'ness	503 ,,	Granton	4,735 ,,
Tyne	400 ,,	Sunderland ...	393 ,,

Making a total of 15,639 tons, to which Spain contributed 4,092 tons; Algeria, 7,582 tons; Tunis, 3,572 tons; and Tripoli, 393 tons.

Messrs. Ferd. Anthony Horle and Co., of 8, St. John's-lane, London, E.C., have issued a new price list of cardboard, envelopes and sundries. Consumers will find the compilation very serviceable, dealing as it does with the many specialties associated with the name of this well-known firm. Messrs. Horle and Co. handle a long range of boards, and claim to be "the cheapest house in the trade."

WILLIAM MAKIN & SONS,
Attercliffe Steel Works, Sheffield, England.
(ESTABLISHED A.D. 1736).
PAPERMAKERS' STEEL and BRONZE TOOLS.
Illustrated Catalogues and Price Lists, in French and English, on Demand.

Digitized by Google

Past and Present.

OPERATIVE PAPERMAKERS AND THE PAPER TRADE.

A Review of Men and Matters—The Various Types of Industrial Organizations—The Ideal Trade Union—Glimpses of Past History—Topical Talks.

By ALFRED SCOTT CHAPMAN.

(Second Article.)

The Tovil Upper Mill, Maidstone, played an important part in the work of organisation. Singularly enough, three societies have made it their battle ground. As the second fight took place as lately as 1873, it will be referred to later, while now we deal with the trouble of 1846-7.

Through internal strife between rivals who wished to be foreman, a dispute began and culminated in the master, Mr. Giles, discharging all the hands. A paper machine had just been started the first in that mill and there were also three vats. Non-society men were now taken on, and, for the first time, "Scowbankers," as they were derisively called, invaded the territory of the Original Society. The men's names are lying before me as I write, but some of their relatives are alive, and to save friction it will be best not to mention them. The effects of this stormy period were wider than would have been thought possible. Among the discharged, the family of one prominent member suffered cruelly; and whenever the subject of Federation was raised in after years, lukewarmness was the most that could be expected in such quarters. Fights were frequent, and at Whitsuntide, 1847, there occurred quite a riot. The non-union men, by dint of such exhibitions of strength from the unionists, were much "impressed" with the "force" of unionism, and resolved to organise themselves whenever the chance came. On the Union side, on the other hand, an indelible feeling of antagonism was produced, even in the case of otherwise fair men. Past and present secretaries of the Original Society could, if they would, admit that such events have influenced their minds into taking narrow lines.

I was then far from England, and far from my home which is equal to saying far from Tovil where I had lived for years, a reminder of those days unexpectedly and rather unpleasantly came before me. It was like the "up-breaking" of ice from troubled waters, or perhaps I was more like one that remain after deep mental wounds. Whilst on my tour in the States I had the honour of the company of an American mate, who undertook to pilot me and introduce friends to them as we visited the mills. I may say in passing that over there was no great ceremony, and many the scenes of excitement, etc. We had called at a certain place, and my friend was full of anxious interest in the reception in store for us at Messrs. Crane Brothers place at Dalton, Mass., where he had recently worked. We entered through the office; thence into the rag engine room. The tender, named Horsburgh (a Scotchman), was pleased to see us, and suggested our going to see Brown, an Englishman and machine-tender there. The introduction was abruptly terminated by Brown saying, "I guess I know him too well!" and walking away to the wire guide. My friend and I looked at each other, both dumbfounded, when Brown returned and broke the silence by saying, "You were one of the party who tried to duck me in the mill pond at Tovil." He was both irate and obdurate, though I tried to explain, and said the incident took place on Whit Monday, 1847, when I was but a child. It was a case of mistaken identity. The person to whom he referred was buried at Catawissa, Pa. He was an elder brother, and was apprenticed at the time. Brown had been in charge of the machine at Tovil Upper Mill during that rough period.

We sat chatting about "Bond" papermaking. Brown said that when Mr. J. B. Crane told him my name, where I came from, and that I was with his sons at Westfield, he jumped to the conclusion that I was his old enemy. When I related the part I had played to reconcile the "United Brotherhood" and the Old Society, he shook my hand and blessed me.

On that June evening in 1871 there was a "surprise party" at Horsburgh's house, when we experienced the hospitality of which the American is so prodigal and so justly proud. When the American desires to put a question (and equally to express astonishment at the reply), he starts off with "Do tell!" and many were the "Do tells!" about our trades unions, which did not then exist among papermakers in the States. Tovil experiences, as related by our old friend, aroused much comment. He said they converted him to the necessity of some sort of understanding or union with his fellows in a mill. When the first news of the United Brotherhood reached him, he and his two brothers immediately sent in their names and subscriptions.

The following very instructive story of those sharp times can be relied on as authentic, having been related to the writer by both persons concerned, at different times and places; though neither of them knew that the other had told it in his own way. As they both have grandsons in the paper-making line, I will refer to them only by initials. "H." worked at Eyehorne Mill, Hollingbourne, and "K." was foreman at "Turkey." The former was a board mill, carried on by H.'s brother, under circumstances which, it is said, were open to criticism.

It was not a remarkable or exceptional event that the master of Turkey Mill and H.'s brother should meet in London; but it was against the unwritten code of paper-

Digitized by Google

makers at that time (and since) for influence to be exercised by the master in hiring workmen. It came about that he told K., his foreman, to put H. at work couching. This request was complied with in the letter, but not in the spirit. For the foreman took advantage of the fact that there was at the time an order in hand for extra weight blue-laid Imperial, 90-lb. per ream, I believe. To have done this under even the best conditions of stuff, felts, etc., would have been skilful work; but the conditions can be so manipulated that it is quite beyond the skill of the most excellent workman to keep from thickening the sheet at the fore side. Result: a blue streak with the wire marks totally imperceptible; a most unsightly effect. When the paper came under the master's eye the result may be imagined; "fourteen days" finished H.'s career—the usual custom in such cases. Only the case-hardened could look on such an incident, and on its sequel, without sorrow. With the failure of his brother, all the small savings accumulated by his wife and her sisters went, and poverty followed. Their impoverished circumstances forced them to live in Sharp's-yard, Maidstone, then a most wretched place. His four big children, always hungry and clamouring for food, pressed a solution of the matter. Depressed by his failure at Turkey Mill, chagrined that his name should have become a by-word and a reproach among his mates, he said to his family one morning: "Work I mean to have, society or not." He went to Little Chart, and started work in a non-society mill. He said, when he entered the non-union mill, driven there by force of circumstances and by the malice of his fellow beings, he felt sure a society would one day arise in mills like those.

Such a case ought to be taken to heart by those who say we should rise superior to our environment, as well by operative papermakers and others. Both the persons concerned were thoroughly good and industrious workmen.

Now we must consider the foundation material used to build up the United Brotherhood Society. About a hundred men (or very few more) made the society at the start. Here we may refer to Countessweir Mill. From an early period this mill and Exeter, in Devon, were on a par with Turkey Mill and Maidstone, in Kent. At that time there were two vats and one machine; the chief work for the vats being "permit paper," the orders for which were fluctuating and intermittent, and at one time the Original Society manned these vats annually. Permit paper and moulds being longer than double medium, it required a good man for the work.

To properly convey an idea of the available resources to make up a society we will name the mills and number of vats concerned. Five men formed a vat's crew in old times, viz.:—Engineer, vatman, coucher, dry worker (sizer and finisher combined), and layer (boy apprentice).

1	Vat ...	Bramshot ...	5	men.
2	,, ...	Countessweir ...	9	,,
1	,, ...	Bradninch ...	5	,,
2	,, ...	Wookey	9	,,
1	,, ...	Bullford	5	,,
1	,, ...	Hagburn ...	5	,,
1	,, ...	Hurstbourne ...	5	,,
3	,, ...	Laverstoke ...	13½	,,
2	,, ...	Darley	9	,,
2	,, ...	Little Chart ...	9	,,

(The "½" represents apprentice.)

The United Brotherhood worked on the lines of the Original Society, but were not quite so hard and fast in their rules and regulations, though the first were a copy of those of the Original Society—(there is an example of this rare document preserved at the office of the *World's Paper Trade Review*). The working system was also as nearly as practicable that of the Original Society; also the "line of route"—1s. 6d. per day was the relief at the "Turn House" in every town. The first object of the founders of the United Brotherhood was to ensure a compass to steer by in the out-of-work days of the nomadic papermaker, caused by shortage of water and various economic factors. In this they had the experience of the older society to assist them. Well did they utilise the instruction, taking care to locate their turn houses away from the elect and select "hard-shell" papermakers who belonged to the Original Society.

(To be continued.)

PETER SPENCE & SONS, LTD.
MANCHESTER.

PURE CRYSTAL ALUM

Used in Sizing the FINEST PAPERS.

Highest-class SULPHATE OF ALUMINA.

ALSO SOLE MANUFACTURERS OF THE WELL-KNOWN ALUMINOFERRIC

Digitized by Google

Employment in Paper Mills.

An Important Decision.

[illegible] in paper mills and [illegible] before the Barnsley [illegible] last week, [illegible] Mr. Ald. Horne [illegible]. The case [illegible] Factory and Work[illegible] Mr. [illegible] Dobson [illegible] Messrs. Charles [illegible] Paper M[illegible], Barnsley [illegible] pleaded guilty to a technical [illegible]

[illegible] charge [illegible]

place on January 16th this year, when he visited the works at 9.55 p.m. and found two boys employed from 6 o'clock in the morning who stated that they had not had any interval allowed for meals during that period.

In reply to questions put by Mr. Dobson, the boys stated that they had had ample time and opportunity to get their meals regularly and comfortably.

The bench took a lenient view of the case and inflicted a nominal fine of 5s. and costs.

Saw Mill Refuse.

It is reported from New Orleans, La., United States, that a company has been registered under the name of the Wood Distillates and Fibre Co., with a nominal capital of [illegible] dols., to utilise the refuse of saw mills throughout the State. The president of the company is Mr. George W. Wright, of Chicago. The process is that introduced by Mr. Charles M. Dobson, a consulting engineer. It is claimed that the company will be able to obtain two tons of fibre from a cord of refuse. Papermakers, unfamiliar with the wonderful talents of Mr. Dobson, will be inclined to think it a difficult task. Mr. Dobson states: "This refuse is worth, gross, 23.25 dols. per cord, and yet millions of cords of it are burned every year, because no process has, till recently, been brought to perfection at a cost that would warrant the mill-owner putting in a retort plant. The expense of operating a plant is [illegible] when you take into consideration the gross value of the product. We can [illegible] every pound of this refuse, a cord of [illegible] the following result under test: [illegible] gallons, ten gallons crude; [illegible] acetate of lime, six gallons wood [illegible] tar, with a gross [illegible] and all this material is [illegible] waste here, as it has been ever [illegible] became an established in[illegible] State. In addition to the above [illegible] this refuse will net two [illegible] papermaking. It is our pur[illegible] our plants an adjunct to [illegible] this section. I consider this [illegible] important enterprises that [illegible] the South, for it [illegible] the lumber [illegible] dollars into [illegible] where we have only [illegible] heretofore. While [illegible] these plants, [illegible] to see every saw [illegible] over to our com[illegible] interested in [illegible] of the slabs [illegible] they are convinced [illegible] for doing this [illegible] which the [illegible]

[illegible] — When writing to ad[illegible] Paper [illegible] source of information.

Digitized by Google

SIMPOLE'S,

Complete Office & Library Furnishers.

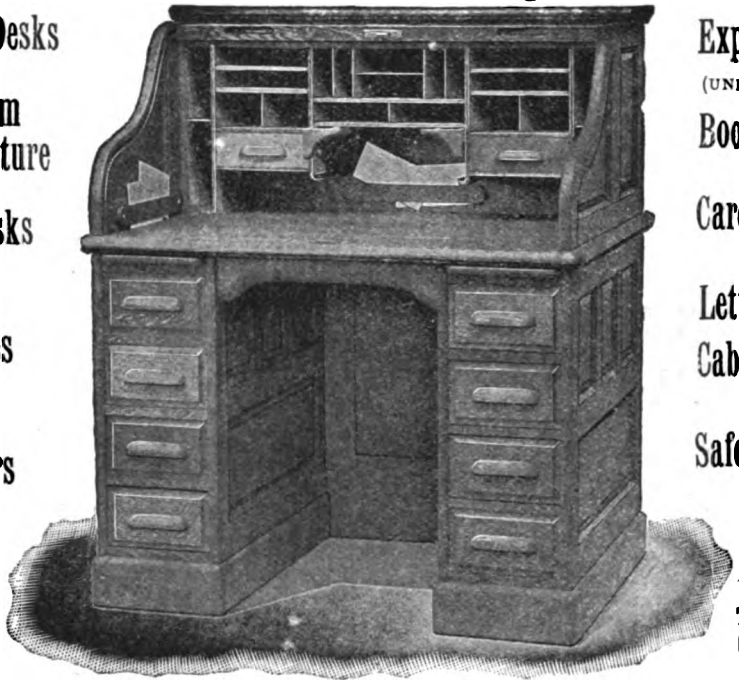
Roll Top Desks

Board Room Furniture

Clerks' Desks

Consulting Tables

Revolving Chairs



Expansion (UNIT SYSTEM) Bookcases

Card Index AND Letter Filing Cabinets.

Safes, &c.

ESTIMATES GIVEN.

INSPECTION INVITED.

Established 1844.

Telephone: No. 1847.

(Late Cathedral Steps), 36, DEANSGATE, MANCHESTER.

JAMES KENYON and SON,

DERBY STREET MILLS, BURY, LANCASHIRE.

ALL FELTS for Papermakers.

Telegrams: "KENYON, BURY."

Dr. C. Wurster's Patented PULPING MACHINES & KNEADERS

For PULPING-UP MACHINE "BROKE," OLD PAPER STOCK, WASTE PAPERS, DRY WOOD PULP, &c.

These Machines, with the same power, do from TWO to FOUR TIMES the WORK of STONES, without Shortening, Affecting, Creasing, or Wetting the Fibre in any way, or Changing the Colour or the Sizing.

Beaters not Required in making Boards from Old Paper Stock.

Can be used for Kneading Clay and other Fillers, as well as for Kneading Dry Bleaching Powders instead of the Bleaching Mill.

Dr. C. WURSTER, 29, Abbey Road, St. John's Wood, LONDON, N.W.

Digitized by Google

AMERICAN

Exports and Imports of Paper.

EXPORTS.

The following comparative values relate to the exports of paper etc., from the United States during the periods mentioned:

	[illegible]	[illegible]
Writing paper and envelopes	$57,166	[illegible]
Printing paper	204,696	[illegible]
Paper hangings	37,694	[illegible]
Playing cards	—	17,[illegible]
All other paper	243,747	[illegible]
Totals	$543,273	$[illegible]

The eight months' statistics are as under:—

	[illegible]	[illegible]
Writing paper and envelopes	$[illegible]	$[illegible]
Printing paper	1,7[illegible]	1,[illegible]
Paper hangings	137,[illegible]	1[illegible]
Playing cards	—	151,[illegible]
All other paper	2,2[illegible]	2,434,276
Totals	$4,[illegible]	$4,770,[illegible]

The following values show the extent of the shipments of paper from the United States to the countries mentioned:

	[illegible]	[illegible]
United Kingdom	$1,1[illegible]	$1,417,[illegible]
Belgium	72,7[illegible]	49,676
France	2[illegible]	[illegible]
Germany	91,117	92,549
Italy	7,[illegible]	6,888
Netherlands	[illegible]	48,[illegible]
Other Europe	[illegible]	[illegible]
British North America	[illegible]	1,[illegible]
Central American States and British Honduras	51,320	57,[illegible]
Mexico	2[illegible]	[illegible]
Cuba	15[illegible]	155,[illegible]
Other West Indies and Bermuda	[illegible]	96,612
Argentina	[illegible]	81,162
Brazil	71,[illegible]	47,[illegible]
Chile	1,2[illegible]	[illegible]
Colombia	[illegible]	26,[illegible]
Venezuela	[illegible]	25,[illegible]
Other South America	45,[illegible]	53,[illegible]
Chinese Empire	17,[illegible]	24,[illegible]
British East Indies	[illegible]	43,[illegible]
Japan	21[illegible]	1[illegible]
British Australasia	[illegible]	[illegible]
Philippine Islands	[illegible]	[illegible]
Other Asia and Oceania	[illegible]	19,[illegible]
British Africa	[illegible]	71,244
All other Africa	[illegible]	5,[illegible]
Other countries	[illegible]	[illegible]

IMPORTS.

The United States imported from the countries mentioned paper including patchment, lithographic labels and prints, etc., during February compared with the corresponding month of the previous year, as follows:—

	[illegible]	[illegible]
United Kingdom	$[illegible]	$[illegible]
Belgium	[illegible]	[illegible]
France	[illegible]	[illegible]
Germany	[illegible]	[illegible]
Other European countries	[illegible]	[illegible]
Japan	[illegible]	[illegible]
Other countries	[illegible]	[illegible]
Totals	$[illegible]	$[illegible]

For the eight months ended February the imports were:—

	[illegible]	[illegible]
United Kingdom	$[illegible]	$[illegible]
Belgium	1[illegible]	[illegible]
France	[illegible]	[illegible]
Germany	1,[illegible]	2,[illegible]
Other European countries	132,[illegible]	1[illegible]
Japan	153,[illegible]	1[illegible]
Other countries	[illegible]	[illegible]
Totals	$3,150,[illegible]	$3,[illegible]

American Tariff Decisions.

The following decisions in reappraisement cases have been handed down by the United States Board of Appraisers:—

Wall Paper.—Paperhanging, from Chas. Knowles and Co., Ltd., London, exported February 12th, 1904; entered at New York file No. 31,[illegible]. Findings of Fischer, G. A.: 14 pieces, 7,[illegible], entered at 1s. 2d. per piece; 53 pieces, 7,517, entered at 6s. 6d. per piece; 50 pieces, 81,443, entered at 7s. per piece. And similar goods. Discount 10 per cent. Add cases and packing. Advanced by disallowance of 10 per cent. discount.

Surface-Coated Paper.—From Sebastian Heilmann, Meresberg, exported November 4th, 1903; entered at New York (file Nos. 9,447, 30,[illegible]). Findings of Board 1: Bronze glazed paper, dess 61, braunesn stoff, 0.335-48, 25 inch broad 480 sheets; entered at 5.70 marks per ream. Less freight, etc. Discount, 2 per cent. All no advance.

Surface-Coated Paper.—From Leonard Biermans, Ltd., Turnhout, exported December 3rd, 1903; entered at New York file Nos. 6,4[illegible]-30,958. Findings of Board 1: Bronze, watered, Nos. 9,071, 1,032, 20 by 24 in., 24,000 sheets; entered at 5.9 per ream of 500 sheets. All no advance.

Paper.—Surface-coated paper, from Leonard Biermans, Turnhout, exported February 11th, 1904, entered at New York file No. 31,432. Findings of Fischer, G. A.: 29 reams marble paper, No. 781, 22 by 26 inches; entered at 6s. 11d., advanced to 7s. 5d. per ream of 480 sheets.

Digitized by Google

Storviks Sulfit Aktie Bolag,

MANUFACTURERS OF

TRADE MARK

H S

EXTRA STRONG SULPHITE PULP,

Specially recommended where Great Strength is Required.

For Samples and Quotations apply to the Sole Agents:

HENDERSON, CRAIG & CO., Limited,

97, QUEEN VICTORIA STREET, LONDON, E.C.

SKOTSELV CELLULOSEFABRIK,

SKOTSELVEN — NORWAY.

EASY-BLEACHING SULPHITE PULP.

Sole Agents for the United Kingdom:

Messrs. BECKER & Co., 64, Cannon Street, London, E.C.

F. C. HUYCK & SONS'

Felts and Jackets,

Manufactured at Albany, N.Y., U.S.A.

FELTS and JACKETS for HIGH SPEED, used on the widest and fastest running paper machines in the United States and Canada.

STRONG, FINE CYLINDER FELTS which give the Highest Finish to the best grade boards and cylinder machine papers.

SPECIAL STRONG OPEN FELTS for Mechanical and Chemical Pulp Machines.

Sole Agents for Great Britain and Ireland:—

W. G. TAYLOR & Co., Ltd.,

LONDON, MANCHESTER, & EDINBURGH.

Remington Typewriter.

THE BUSINESS BUILDER.

(Write for Particulars).

100, GRACECHURCH STREET, LONDON, E.C.

253, OXFORD STREET, LONDON, W.

Digitized by Google

WORLD'S PAPER TRADE REVIEW.
Office: 58, Shoe Lane, E.C.

TRADE NOTES.

EMPLOYMENT IN THE PAPER TRADE.—According to the Labour correspondents of the Board of Trade, whose reports appear in the *Labour Gazette* for the current month, in the paper trade employment remains fairly good on the whole. Branches of Trade Unions with 2,386 members had 2·9 per cent. unemployed at the end of March, the same as at the end of February. At the end of March, 1903, the percentage employed was 2·6.

MR. C. S. VARCOE, of Messrs. William Varcoe and Sons, Stoke-on-Trent, left last week for America. He crossed in the "Majestic," and intends spending a few weeks among the American papermakers, the majority of whom know, use, and appreciate his firm's brands of Natural White China Clays.

MR. ALBERT SPICER, of Messrs. James Spicer and Sons, Ltd., has been elected chairman of the council of the London Chamber of Commerce for the ensuing year.

MR. CLAYTON BEADLE'S retirement from the Bexley Urban District Council, owing to his removing his residence from Lamorbey to Sidcup, was referred to by the chairman (Mr. W. V. Hudson, J.P.) at a recent meeting of that body. Mr. Beadle had, he said, only been with them a few years, but they had found him very useful as a member of the Electric Lighting and Traction Committee. And the members generally would remember that a year or two ago, when they were going to be troubled with a scarcity of water, Mr. Beadle devoted a great deal of his time to the subject of the water supply of the district, and no doubt in that respect his work was exceedingly useful to the whole district. However, the clouds had made up any deficiency there might have been in the rainfall, and inasmuch as they had had what was called a two months' rainfall, he was afraid Mr. Beadle's efforts in that direction were not so much appreciated as they might have been had it remained dry. He had just had a telegram from Mr. Beadle regretting that he was unable to attend that meeting. He was sure they would all be sorry he had removed from the parish, and was consequently unable to any longer represent the district of Lamorbey.

MR. WILLIAM MCCORKINDALE, a Scottish papermaker, has been appointed the superintendent of the Parsons Paper Co., Holyoke, Mass., U.S.A. He was born in Greenock in 1850, and commenced his career in the paper industry in 1861 as an employee of Messrs. Brown, Stewart and Co., where he remained seven years. He then went to the United States, occupying positions in various mills as machine tender. At the mill of Messrs. Crane and Co., Dalton, Mass., he stayed for a period of nine years. It may be mentioned that in 1881 all of the No. 1 ledger papers used in the States, were made in Berkshire County, Massachusetts, and it was thought that they could not be made anywhere else. Mr. McCorkindale thought that they could be made at Holyoke just as well, and in an interview with the late Mr. Joseph C. Parsons he asked that gentleman to make the experiment in that direction. Mr. Parsons consented, and bought the Mt. Tom mill for that purpose. In June, 1881, Mr. McCorkindale removed to Holyoke. The mill was remodelled and was started in October, 1881, and in a few months made as good ledgers as had been made up to that time. In 1888 the demand for the goods exceeded the capacity of the mill, and the company planned a new mill, its No. 2, which was designed as a model plant, and which fully realised the designs of its creators. When the American Writing Paper Co. was formed the No. 1 and Mt. Tom mills were sold to that company, the Parsons Paper Co. retaining the Sergeant-street mill and devoting all its energies to the production of ledgers and bonds, of which papers Mr. McCorkindale has made a special study. Mr. McCorkindale is not only superintendent of the mill, but is also a stockholder in the company, as well as in the Millers Falls Paper Co.

BRITTAINS, LTD., HANLEY.—Lien registered April 6th, for £5,000 five per cent. debentures, part of £15,000; amount previously issued, £10,000; no trustees; charged on the undertaking and all the freehold and leasehold hereditaments, machinery, stock-in-trade, chattels, book debts, uncalled capital, and all other property.

BERGVIK CO., LTD.—The report of the Bergvik Co., Ltd., states that the trading and profit and loss account of the Swedish Co. (Bergvik och Ala Nya Aktiebolag) for the past year, after charging expenditure on necessary repairs, insurance, interest and depreciation, and reserving £6,675 to meet interest and redemption charges payable in Sweden during the current year, shows, including £2,126 brought forward, a net profit of £33,019, out of which a dividend has been declared of £28,000, leaving £5,919 to be carried forward. Taking credit for this dividend, the profit and loss account of the English company, after providing for the London charges and interest on the debentures, shows a net profit of £28,941. The directors recommend a dividend of 16s. per share, being 8 per cent. for the year, on the deferred shares, carrying forward £336.

BABCOCK AND WILCOX, LTD.—At the meeting of Babcock and Wilcox, Ltd., engineers and boiler makers, of London, Manchester, and Glasgow, held in London on Friday, the Chairman said the net profit during the year was £180,042, as against £171,533 last year, making, with the £17,878 brought forward, a total of £197,920 for distribution, against £157,820. This enabled them to pay a dividend of 8 per cent., a bonus of 2 per cent. on the ordinary shares, to place £50,000 to reserve, £25,000 to dividend equalisation fund, and carry forward £26,820. This profit had been made in the

Digitized by Google

face of the keenest competition, and under the most depressing conditions. The report was adopted.

THE sixty-fourth report of the committee of management of the Stationers' and Paper Manufacturers' Provident Society has just been issued, and shows an increase to the invested funds of the Society amounting to £352 11s. 6d., in addition to the proceeds of the Anniversary Dinner, which was held last year, and resulted in an addition to the Residence Fund of £217 7s. 4d. During the past year one member has died and three have joined the Society, and one annuitant (a widow of a member) has died. Funeral allowances of £23 have been granted in respect of the deceased member and the annuitant. Payments for annuities and grants from the Residence Fund are shown to be rather less than those for last year and the temporary assistance a little more. Subscriptions of members show a considerable falling off, owing to so few new members joining the Society, and the committee urge its advantages to those eligible to join.

Stocks and Shares.

The following report is supplied by Mr. F. D. Dean, stock and share broker, 36, Corporation-street, Manchester. (Telegrams: "Fredean, Manchester;" 'Phone, No. 2180).

Business in the Paper Share section of the markets continues to be of very slender proportions, whilst alterations in quotations are few and far between. The general trend, however, is towards higher levels, but holders are rather chary at selling, preferring to await the results for the current half-year's trade, which should prove better reading than has been the case for some little time past. In the list given below, Burnley appear to be the only share to decline, and this only to the extent of ⅛. In the advances, however, we have Star ordinary up another ⅛ at 8¼ buyers, whilst there is also some enquiry for the preference and debenture stocks. North of Ireland have also recovered their recent fall, and have improved to 6¾ buyers, with a few shares offering at 7. A. M. Peebles and Sons ordinary remain firm, and the preference are up ¼ at 4½ middle. Waterlow and Sons deferred are a shade harder at 18½, and the preferred at 12¾ are also better by ¼, with business done at 12¾. Annandales firm but quiet.

In Chemical shares, there has been rather a "boom" on several rumours concerning the alkali trade, whilst the salt returns also show large increase on the corresponding period of 1903. Brunner, Monds have not shared so much in the general advance, though here the old ordinary are better by 1/16 at 4 1/16 bid, and the preference are up as much as ⅜ at 17¼. Castner-Kellners are a shade firmer at 14s. 9d., while even Electrolytics are up 6d. at 5s. 3d. buyers. The most pronounced rise has, however, been in Salts and United Alkalis, the former of which have gained 1s. 6d. in ordinary and ¼ in preference, whilst Alkali ordinary jumped to 24s., though now rather easier at 23s. 6d., which is an advance on the week of 3s. 6d.; the preference have also had a good innings, and mark an improvement of 1/16 at 7 15/16 middle, while the debentures are up ¼ at 98.

PAPER, &c.

Amount Paid.	Nominal Amount.	Name of Company.	Dividend last half-year.	Prices Apr. 20.
			%	
1	1	Annandale & Son ord.	10	24 6—25/6
5	5	do. do. pref.	5	5¼—5⅜
100	100	Bergvik Co., 4½% d. bs. Nos. 1—3,000	4½	98—100
10	10	do. do. deferred	16	12½—13¾
10	10	do. do. 6% cum. pref	6	12¾—13¼
4	5	Burnley Paper Co.	12½	7¼—7½
7	7	Bury Paper, ord.	nil	6¾—7¼
7	7	do. 6% pref.	nil	7—7¼
5	5	Darwen Paper Mill Co. "A"	10	10¼—10⅝
3¾	5	do. do. "B"	10	7¾—8
1	1	do. "C" issued at £1 pm.	10	2—2¼
10	10	E. Lancashire Paper Co.	10	14½—15
10	10	do. do. 6% pref.	10	14½—15
5	5	do. do. bonus	5	4¼—4½
3	5	Kellner-Partington Co.	15	9—9¼
5	5	do. do.	15	16—16½
100	100	do. do. debs. (red. 1914)	4½	101—103
5	5	N. of Ireland Paper Co.	10	6¾—7¼
5	5	Olive & Partington 5% pref.	5	5¾—5⅞
7	10	Olive Brothers	nil	5¼—6¼
10	10	do. do. fully paid	nil	8¾—9¼
5	3	do. do. pref.	10	4—4¼
1	1	Owen, T. & Co. 6% pref.	6	17/0—18/0
100	100	do. do. debs.	5	94—96
5	5	Peebles (A. M.) & Son	4	3¾—3⅞
5	5	do. 5% cum. pref.	5	4¼—4⅝
100	Stock	do. 4½% deb.	4½	96—100
3	5	Ramsbottom Paper Co.	10	5¾—5⅞
1	1	do. do. cum. pref.	5	21/0—22/0
4½	5	Roach Bridge Paper Co.	10	5¾—6¼
5	5	Star Paper Co.	10	8¼—8½
3	5	do. do. cum. pref.	10	6—6½
100	100	do. do. deb. stock	4½	99—100
10	10	Spicer Brothers cum. pref.	5	9¾—10
10	10	Waterlow & Sons non.-cum. def.	12½	18—19
10	10	do. do. non.-cum pref.	4	12¼—13
10	10	do. do. cum. pref.	3½	8¼—8½

CHEMICALS, &c.

1	1	Brunner, Mond & Co.	30	4 1/16—5
10/-	1	do. do; "New"	30	2¼—2 5/16
10	10	do. do. 7% cum. pref.	7	17—17½
1	1	Castner-Kellner Alkali Co	nil*	14/6—15/0
100	Stock	do. do. 4½% deb.	4½	50—52
5	5	Clayton Aniline ord.	5	2¾—3¼
5	5	do. do. cum. pref.	nil*	4—4½
1	1	Electrolytic Alkali ord.	nil	5/0—5/6
1	1	do. do. 7% pref.	nil	11/6—12/6
5	5	Langdale's Chemical Co. Ld	2½	25/6—26/6
9	10	Lawes Chemical ord.	4½ †	3¼—3⅝
10	10	do. do. pref.	7	9¾—10
4	4	Salt Union ord.	nil	13/3—13/9
6	6	do. 7% non. cum. pref.	6/-	3¼—3⅝
100	Stock	do. 1st mort. deb.	4½	85¼—85⅝
100	,,	do. "B" mort. deb.	4½	80—82
10	10	Steiner (F.) & Co. ord.	•nil	6—7
10	10	do. do. cum. pref.	5	7¼—8
100	Stock	do. do. deb. stock (red. 1922).	4	84½—85½
10	10	United Alkali Co.	nil	23/3—23/9
10	10	do. do. cum. pref.	7	7¼—7⅝
100	Stock	do. mort. deb. (red. after 1901)	5	97½—98½
1	1	United Indigo & Chemical	nil	2/0—3/0
1	1	do. do. 6% cum. pref.	‡6	7/0—7/6

• Interim † For year. ‡ Div. to 31/12/02.

Digitized by Google

THE main topic of conversation this week in business circles, as well as in political ones, has been the Budget. There has been a spice of additional interest added to our annual National Account by the fact that it signalised the *debut* as a financier of Mr. Austen Chamberlain. I think his maiden effort in the matter of Budgets is very fairly creditable to him, but when, even compared with some of the most indifferent Budgets of the past, it cannot be said to take a high place. In fact, it is a Budget of which no Chancellor of the Exchequer could ever hope to be proud. It is a beggarly sort of Budget, and it is not the sort of thing upon which any political party would like to "go" to the country.

* * *

AS THINGS are going now it is hard to see where taxation is going to stop. In principle Mr. Austen Chamberlain objects to the Income Tax, but in practice he finds it the most convenient thing from which to make up a substantial proportion of his deficit, so we are to have one more 1d. on the Income Tax, which will make it 1s. in the £. Under these circumstances, I am glad that I am only a man of small income, but if things are to go on as they are doing I should not be surprised to find before I die that the Income Tax amounts to 20s. in the £. That I suppose would realise the dream of some statesmen: "The State for all, and all for the State."

* * *

FORTUNATELY—if we except the Income Tax, and, for that matter, the additional taxes on tobacco and tea, which affect paper trade folk as well as other people—the paper trade as such is not affected by new Budget imposts; and I suppose for that small mercy we ought to be thankful. I have no doubt the time will come, if we go on at our present rate, when the Chancellor of the Exchequer will come in collision with the paper trade, just as he has with the corn trade, and the coal trade, and the tobacco trade, and the tea trade—not to continue the list further, although I do not think I have even off-hand exhausted it. Some such undesirable consummation as that I have indicated would certainly come off sooner or later if this country became complicated in the war in the Far East; but for the present, thanks to the newly-made treaty with France, the chances of our being involved in the struggle are, for the present, at least, happily reduced. Personally, I am only inclined to think that the present Budget is a good one in so far as it does not affect paper trade interests. For the rest, I think very little of it, for as a fiscal entity it seems neither honestly Free Trade or candidly Protectionist—it is a hybrid thing: neither fish, flesh, fowl, or good red herring.

* * *

THOSE who regard themselves as being amongst my "constant readers," as the *Family Herald* correspondents used to like to describe themselves, will remember that, when the Prince of Wales made the best of his many good speeches at the Guildhall at the end of 1901 he summed up the lessons he had learned during his tour in these terse and truthful words: "The old country must wake up. . ." It will be remembered that, week after week, I rubbed in the true inwardness of that advice into the mental skins of paper trade people. I got some thanks for my pains, and also some kicks for my trouble. Which is Human Nature—especially the kind of H. N. which has to do with newspaper fellows.

* * *

BUT that by the way. What I want to get at is this: A good many people took the Prince's hint, and not only rubbed their own eyes and woke up, but nudged and roused as many of their neighbours as they could conveniently reach, with the all round result that the trade of the country has materially benefited. Some of the early risers captured the equally energetic worms. One of them—the risers, not the worms—was Mr. Maurice Graham, joint director of the firm of Messrs. Graham, Morton and Co., Ltd., the well-known engineers and contractors, of Leeds, whose specialities in conveying and other plant are familiar to many of my paper trade readers. Now this is *not* an advertisement—a paid-for one, that is: you can regard it as a free one if you like, for if it be, the enterprise of which it is a record deserves it, and makes me lift my hat to Mr. Maurice Graham.

* * *

VERY well; I'll try and get to the point this time anyway. Mr. Graham determined that the Prince's admonition should not fall to the ground so far as he was concerned. He therefore took the matter up forthwith, crossing to New York several times to investigate American business methods and workshop practices, with the intention, on his return, of designing, constructing and equipping new engineering works for his firm as a test in record time, and so beating the American on his own ground, and demonstrating that the words of H.R.H., if taken seriously, had a significance for British commerce, that it would be thankless to deny and unwise to ignore. That some faith was necessary in thus expending a large sum of money at a time when other firms were practically discharging their men, and when business generally was at a very low ebb, is a significant feature of this exhibition of enterprise.

* * *

THE result of Mr. Graham's efforts is told in a letter addressed by him to the Prince of

Digitized by Google

Wales, a copy of which has been forwarded to me. It reads thus:—

SIR,—In a memorable speech some months ago you warned the engineers and manufacturers of this country to "Wake up," complaining, and justly so, that many of us were sadly lacking in enterprise at that time.

This speech made a considerable impression upon me, as I was making an exhaustive enquiry with reference to the design and construction of new engineering works to be built on the most modern and up-to-date principles, and also to cope with the American and German competition.

I visited over fifty engineering works in the United States, and many in Germany, and the result of my travels has been the designing and construction of our large new engineering works in Leeds.

One of the interesting features has been the rapid construction and equipment of the same.

On May 16th, 1903, the first sod was cut, and in the same year—November 2nd, 1903—the works were completed and in working order, including the offices, the time only being five and a-half months.

This is an engineering record feat, and has been recognised by the *Times*, the *Illustrated London News*, the *Engineer*, and all the leading technical journals and Press.

I respectfully beg of you, therefore, to accept a Souvenir illustrating this work, which has been done by a British firm in the short space of five and a half months, and which eclipses all American records.

I have the honour to remain, etc.

* * *

THE answer of the Prince through his equerry was as follows:—

The Prince of Wales desires me to thank you for the copy of the Souvenir illustrating what has been done by your firm in the design and construction of new engineering works, built on the most modern and up-to-date principles, which you have been good enough to send for His Royal Highness' acceptance. His Royal Highness has read your letter of the 28th instant with much interest, and desires me to congratulate you in his name on the great rapidity with which your undertaking was carried out.

* * *

MR. MAURICE GRAHAM considers the answer of the Prince of Wales to his communication "national property." I do not know that I can go *quite* so far as that, but, anyhow Mr. Graham is to be congratulated on his own individual enterprise and that of his firm, in the matter which formed the subject of the correspondence. It goes to illustrate what I always contended for these columns, that in the matter of initiative and executive capacity, industrial or otherwise, Britishers are every whit as good to-day as ever they were (and better, perhaps), but years of prosperity and top-of-the-pole-ness have had a demoralising effect upon them, and has led them to think mistakenly that without effort in proportion to the march of the times and continuous discipline of a Progressive character, commercial supremacy would still continue to be theirs. Thanks, largely to the wisely conceived and rousingly delivered speech of the Prince, much has been done to better the conditions of British trading—much more than a dozen fiscal controversies could do—and if we only keep on in our present course the future seems clear enough.

* * *

AND now, brethren, finally and in conclusion, as the long-winded preachers are apt to say, I follow up my last musical stories with two more, which, as they put it on concert programmes sometimes, are "selected." Here is the first: A musical organisation, intending to give a performance of an oratorio, began to be alarmed about the probable cost of the production. Accordingly, the director of the chorus said to the leader of the orchestra, who was a professional musician: "We've got to keep down our expenses, and I thought I might get you to leave out the trombones. You know they have only four measures in the entire oratorio, and if we leave them out we can save at least £5, and no one will be any the wiser." The leader of the orchestra was extremely shocked. Assuming a tragic attitude, he exclaimed: "That would be an insult to the composer!" The chorus director reflected a moment and then said, cheerfully: "Oh, never mind him; he's dead!"

* * *

THE second reads thus:—A famous organist had just finished a somewhat successful recital, when the boy organ blower emerged from the loft, remarking, "We did it, didn't we?" That was too much for the great man. "We! What did you do?" A week later a second recital was on. The organist took his place, and was about to open up, when he noticed by the indicator that the bellows were empty. Tearing round to the loft he confronted the youth. "What in thunder ——!" A still, small voice broke in, "Is it we?"

G. A. F.

Telegraphic Address: "APSLEY, LIVERPOOL." Telephone: 382.
MAKIN & BANCROFT,
Codes { A B C, 4th Edition, Liebers, Private.
Apsley Buildings, 4, Old Hall Street, Liverpool.

SOLE BRITISH AGENTS FOR THE SAULT STE. MARIE PULP & PAPER Co.,
ONTARIO, CANADA.
Direct Importers of All Papermakers' Materials.

Telegraphic Addresses:— "BERNER, LONDON." "BERNER, MANCHESTER."
BERNER & NIELSEN,
London Telephone:— No. 248 AVENUE.
61 & 62, Gracechurch Street, London, E.C.,
And at 17, Exchange Buildings, St. Mary's Gate, Manchester.

WOOD PULP OF ALL KINDS
FOR PAPERMAKING.

Digitized by Google

Winkler's Paper Testing Office.

The eighteenth annual report has recently been issued relating to the work of Winkler's Paper Testing Office, Leipzig. It is stated there is a good demand for its services on the part of both papermakers and paper users, and considerable support is also given by the German publishing trade. Attention is not only given to paper, but also to raw materials, chemicals, colours, etc.

The office has become an authority for settling questions of moisture in pulps in connection with which special facilities have been introduced. There were 775 moisture tests conducted during the year, and other tests brought the total up to 1,560.

There were 380 cases which called for microscopic determination of the composition of fibres. It appears that 125 papers were examined for toughness; 189 as to size resistance; 65 as to discolouring; 108 as to exemption from acids; and 65 as to transparency. Enquiries were frequently received by the office as to the use of certain papers for specific purposes. The work of the office shows that rejections in many cases were not entirely unjustifiable, although in many cases a closer examination proved that the objections raised could not be maintained.

As in former years, paper experts studied and acquired practice as a preparation for responsible posts which they had in view. Among those receiving training at the office was an Italian gentleman who joined his father's firm of papermakers, also another gentleman who was appointed manager of a chemical wood pulp factory and paper mill. Another student acquired a thorough knowledge of paper before joining a fancy and surface paper factory.

The value of the office is also recognised by the printing trade, and the Leipzig printers arranged for a series of lectures on paper testing. A highly glazed surface of printing paper is fast losing its popularity, a substitute being required giving equally good results. The matter is engaging the attention of the Winkler Office, and the results will be published in due course.

Reference is made in the report to a method for preserving manuscripts and parchments invented by Dr. Schill, and this process is in use in some libraries. The cause of the premature destruction of papers depends partly upon the fibres from which they are made, and also on the influence of acids, sizes, etc. Dampness, dry heat, and fungus are also great enemies in regard to the preservation of documents, etc. The method of Dr. Schill consists in coating the documents with a special substance which gives a protection to the paper against any outward influence. The experiments made by the office have proved satisfactory.

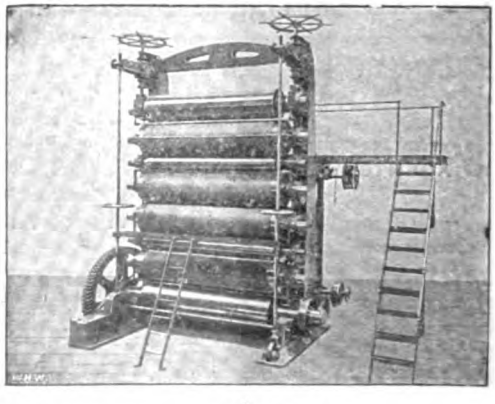
The transparency of paper has also been given special attention, the opaqueness being brought under six classes, from O, which is quite transparent, to V which is as opaque as can be reasonably expected.

Amongst enquiries was one as to the cause of spots appearing on wall paper after it had been pasted on the wall. It was proved in some instances to be due to the acid in the glue, but in others it was the raw paper which after a certain time of exposure to air and sun discoloured and became dirty. Experiments were also conducted with the view of obtaining suitable methods of sizing. The cause of breakages in parchment papers was found to consist in free acid, and in other cases chloride of zinc was used in the manufacture of the paper.

Concerning moisture in china clay the report states that in Great Britain 5 to 6 per cent. moisture is general; in France, 10 per cent.; in Austro-Hungary, 8 per cent., but no fixed rule seems to have been made in Germany, and it is suggested that papermakers should come to some understanding.

Concerning the loss of fibre in the process of papermaking, some curious results are mentioned, in one case in a mechanical wood pulp paper there was a loss of 45 per cent. in some unexplained manner, and in another case, that of sulphite cigarette paper, out of 60 per cent. sulphite blended with 40 per cent. rag, only 10 per cent. sulphite could be found, so that the remainder must in the process of manufacture have become dissolved and gone out with the surplus water. A question dealing with calender rollers as to the surface becoming brittle and pealing off and showing holes, it appears that the cause was due to acid combined with high pressure and heat injuring the surface of the rollers.

James Milne & Son, Ltd.
MILTON HOUSE WORKS,
EDINBURGH.
Papermakers' Engineers.



Telegrams:—"MILNE, Edinburgh."

Digitized by Google

SPECIAL PREPAID ADVERTISEMENTS

IT IS IMPORTANT that Advertisements under any of the Headings mentioned below should reach us by the first post on Thursday to insure insertion the following day.

SITUATIONS WANTED—Charges for advertisements under this heading are One Shilling for twenty-four words, and One Penny per word after. Minimum charge One Shilling. Three Insertions are given for the price of two. Cash to be sent with Order.

SITUATIONS VACANT, BUSINESSES WANTED or FOR DISPOSAL, MILLS WANTED or TO LET, MACHINERY, and MISCELLANEOUS—Charges for Advertisements of the above class are Three Shillings for fifty words or under; One Shilling extra for every line or portion after. Ten words to be reckoned for each line.

LEGAL & FINANCIAL ANNOUNCEMENTS, TENDERS, SALES BY AUCTION, &c.—One Shilling per line.

ADVERTISERS, by paying an extra fee of Sixpence, can have the replies addressed to the WORLD'S PAPER TRADE REVIEW Office under a number, and such replies will then be forwarded post free.

PAYMENTS must be made in advance, except where the advertiser has a running account, in which case the cost, can be debited thereto.

CHEQUES and Post Office Orders to be Crossed and made payable to W. JOHN STONHILL & CO.

OFFICES—58, SHOE LANE, LONDON, E.C.

Situations Vacant.

EXPERIENCED Paper Packer required at once. Man out of work preferred.—Apply, Mill End Mill, Rickmansworth. 9425

REPRESENTATIVE Wanted, with good export and home connections, for the Sale of Straw Paper.—Address, "I. C., 7 020," care of Rudolf Mosse, 46 47, Jerusalemer Str., Berlin, S W. 9423

Situations Wanted.

ENGINEER and Millwright, well up in Paper Mill Work, several years as head engineer in large Mills, requires Situation.—Address, No. 9,421, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9421

FINISHER, age 24, used to S.C. Printings and Browns, seeks Situation; good references; capable of taking charge.—Write, stating wages, to No. 9,402, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9402

MACHINEMAN desires change; used to Super-Calendered Printings or Glazed Casings, etc.; strictly steady and married.—Address, No. 9,420, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9420

PAPER MILL MANAGER wants Re-engagement; thoroughly experienced in Ropes, Browns, Bag Papers, Glazed Packing, Shops, Paper made all from Wood; strictly steady, and excellent testimonials.—Address, No 9,428, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9428

PRACTICAL FOREMAN seeks Situation; experienced in Ropes, Shops, all classes of Browns; at present in small Mill.—Address, No. 9,416, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9416

PRACTICAL MANAGER seeks Re-engagement; experienced in Printings, S. C. Whites, Creams, Cartridges, Coloured Printings, Sulphite Papers, the Preparing in every Department; first-class testimonials.—Address, No. 9,427, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9427

PRACTICAL Paper Mill Foreman requires Situation; M.G. Caps, Manillas, Casings, Drabs, Cutlery, Imitation Parchment, Hosiery, High-class, Frictioned Glazed; capable of taking entire charge; steady; testimonials.—Address, No. 9,429, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9429

RAG and WASTE PAPER TRADE.—Young Man (27), experienced, desires Situation; can take charge of warehouse, buy, sell, or travel; first-class testimonials.—Address, No. 9,401, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9401

WANTED, Re-engagement as Manager, or any Position of Trust, by thoroughly practical man; experienced in all High-class Papers (Machine and Loft-dried), Blottings, Fine Printings, etc.—Address, No. 9,399, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9399

WANTED, Situation as Cutterman or Reelerman; thoroughly experienced; first-class references; capable of taking Foreman's place in this capacity.—Address, No. 9,419, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9419

WANTED, Situation as Fitter and Turner (age 25) in Paper Mill; good all round experience; good references.—Address, No. 9,415, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9415

Machinery.

FOR Delivery about June, one 10-ft. by 7-ft. 4-in. wide Drying Cylinder, by Bertrams, with pedestals, driving gear, complete. Can be seen working by appointment.—Apply, Fisher and Co., Ltd., Tamworth. 9413

FOR SALE, Marshall Refiner, or Perfecting Engine, medium size.—Address, "Refiner," No. 9,426, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9426

FOR SALE, Modern Paper Machine, to take 72-in. wire; six drying cylinders, 4½-ft., two of 4-ft.; set of five chilled rolls; circular frame to cylinders; three wrought-iron knotters; vertical steam engine; 20-ft. Cornish boiler, lately insured at 75 lbs. Above, in good order when shut down, offered great bargain.—James Mead, Paper Mills, Penryn. 9424

FOR SALE, Several Second-hand Dandy Rolls, equal to New.—For full particulars and sizes, write to T. J. MARSHALL & Co., Campbell Works, Stoke Newington, London, N.

Also Several Second-hand Red Rubber Deckle Straps.

If you WANT A DANDY ROLL QUICKLY, Telegraph "DANDYROLLS, LONDON."

Telephone Number: 79 "Dalston." 6288

WANTED, Second-hand 72-in. Super-Calender; rotary or stationary digester to hold 10—15 cwt. rags.—Sindall, 15, Borough High-street, London. 9422

Miscellaneous.

JOHN FULTON & CO., Engravers of Rollers for Printing Wall Papers, etc., also of Rollers for Embossing all kinds of Paper.—Knowsley Street Engraving Works, Manchester.

WANTED to Purchase, New Army Khaki (Cotton) Cuttings.—Address, No. 9,414, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9414

The British and Colonial Printer and Stationer,

PUBLISHED EVERY THURSDAY.

W. JOHN STONHILL & CO., 58, Shoe Lane, LONDON, E.C.

Digitized by Google

ZELLSTOFFFABRIK TILSIT,
TILSIT, GERMANY.

Mitscherlich Sulphite Pulps.
HARD STRONG and
EASY BLEACHING QUALITIES.

Sole Agents in United Kingdom:
ANDREWS & Co., LTD.,
91, Queen Victoria Street,
LONDON, E.C.

WILLIAM VARCOE AND SONS,
REGISTERED
STOKE-ON-TRENT,
CHINA CLAYS
For PAPER-MAKERS.

FOR SALE.

The World's Paper Trade Review
A WEEKLY JOURNAL FOR PAPER MAKERS & ENGINEERS.

ESTABLISHED 1879.
No. 1218 Old Series
No. 1163 New Weekly Series

THE LEADING JOURNAL
For the British Paper & Pulp Industries.

Printed and Published EVERY FRIDAY
by W. JOHN STONHILL & CO.,
at 58, Shoe Lane, London, E.C.

Subscription. £1 per Annum, post free to any part of the world.

REPRESENTATIVE FOR THE LANCASHIRE, YORKSHIRE, AND MIDLAND DISTRICTS
THOMAS FOSTER,
MANCHESTER.

FRIDAY, APRIL 22, 1904.

PRINCIPAL CONTENTS.

FOR LIST OF ADVERTISERS
See Page 23

Employment of Young Persons in Paper Mills.

... interest to the whole ... the Barnsley ... week. Messrs. Charles ... of the Denaby Paper

Mills, Barnsley, were summoned under the Factory and Workshop Acts for employing young persons continuously for a period of more than five hours without an interval for meals. The firm admitted a technical offence, and Mr. Joshua Dodgson, factory inspector, stated that Messrs. Marsden and Sons had not erred wilfully, in fact they were under the impression that paper mills were exempt, and the Bench inflicted only a nominal fine. The matter is of the greatest importance to papermakers, as no doubt the offence of which Messrs. Marsden were convicted is being committed in the majority of the paper mills of the United Kingdom daily. Mr. Joseph Dixon, it will be remembered, at the annual meeting of the Papermakers' Association, referred to the Act as a hardship on papermakers, and it was decided to put the matter before the proper authorities, with the object, if possible, of securing certain exemptions.

* * *

Technical Schools of Papermaking.

The provisions made for giving a technical training to papermakers at the Municipal School, Manchester, have interested our competitors the Germans. Some time ago the Society of German Paper Manufacturers appointed a committee to study the problem of a technical school of papermaking subsidised by the German manufacturers. Profs. Ernst Kirchner, of Chemnitz, and Dr. Paul Klemm, of Leipsic, have written a report recommending the establishment of such an institution. Now the Society has named a sub-committee, which will be sent to Vienna and Manchester to study there the methods of the papermaking schools. The sub-committee is composed of the following: Mr. Erfurt, commercial counsellor at Straupitz; Mr. Renker, of Düren; Dr. Klemm, of Gautzsch, near Leipsic; Mr. Ditges, general secretary of the Society of Paper Manufacturers at Berlin. The report of this sub-committee will be submitted to the congress of manufacturers to be held on June 18th at Hamburg. It has also been decided to request a polytechnic school to establish a department for teaching the chemistry and physics of paper manufacture.

* * *

The American "Paper Trust."

Newspaper proprietors in the United States are endeavouring to work up a strong case against the International Paper Co., of New York, and the General Paper Co., of Chicago, between whom, it is contended, there is an alliance organised in restraint of trade and in defiance of the law. An investigation by the Department of Commerce is requested, and at a recent hearing by the House Judiciary Committee, Messrs. Don C. Seitz and John Norris, of the *New York World* and the *New York Times*, respectively, together with a committee from the American Newspaper Publishers' Association, claimed to represent 280 leading daily newspapers. It is stated that the "Paper Trust" and its allies began last year to enforce conditions that have become intolerable to the newspaper trade. The newspaper proprietors point out that 36 dols. a ton was formerly a fair average price for white printing paper, while large consumers bought as low as 33 dols., and now large consumers had to pay an advance of 10 to 14 dols., and small country newspapers 15 dols., the latter formerly paying 40 dols. per ton being called upon to pay 55 dols. "What ordinary business," it is asked, "could stand an increase of 33 per cent. in the cost of its raw material," especially as newspaper proprietors declined to respond to the cry of the paper combine to reduce the size of their publications, and to raise the price to the public and also to advertisers? Mr. Seitz, in addressing the House Judiciary Committee, said:—"We decline to pay the tax applied by the over-capitalising of obsolete mills or for the profit of Wall street speculators, without an effort to secure the protection of the committee; we decline to pay for marked up timber lands, marked up and sold by their owners to themselves; we decline to pay the interest charges on money borrowed on notes to provide working capital for an organisation that looted itself in organising and calls out that it must get 33 per cent. more for its wares or deprive its customers of their use." The General Paper Co. was said to have been created to corner and skin the paper trade west of the Indiana line, except that it allowed the International Paper Co. to hold its Chicago and St. Louis trade, but against which the newspapers could take what was tendered them or go without. The method employed to evade the law was described as follows:—"There is a distinct division of territory between the General Paper Co. and the International. They do not bid for each other's customers, though they sometimes swap them when a convenience can be served. The outside mills cannot sell to their customers or offer their products. The supply is below the demand, and this makes it easy to preserve the system. The so called independent mills all have an arrangement by which any surplus they may produce is taken by the International at a price believed to be 2 cents at

Digitized by Google

the mill. They are thus enabled to have a secure market and get a long price from the people. The plan is perfect and simple, and it works. There has not been a finer holdup scheme devised since the first Morgan buccaneer chased the Golden Galleon on the silver seas."

Swiss Tariff on Paper.

The proposed New Customs' Tariff for Switzerland shows a heavy increase in the duties on paper. The following list, supplied by the Papermakers' Association of Great Britain and Ireland, gives the old and new rates:—

	Old. Cwt.	New. Cwt.
Paper for Packing—rough, one colour	1s. 7½d.	4s. 1d.
Not otherwise mentioned	1s. 7½d.	9s. 4d.
Printing paper and oiled paper, writing or letter paper of one colour	3s. 3d.	4s. 6½d.
Other more than one colour ..	4s. 0½d.	6s. 1½d.
Blotting paper, filtering, parchment, tissue, drawing, tracing—of one colour	3s. 9d.	7s. 3½d.
Envelopes	109. 2d.	24s. 5d.
Cardboard, from 200 to 100 grammes.	3s. 3d.	6s. 6d.
Over 100 grammes	1s. 3d.	1s. 1½d.
Paper and Cardboard, ruled and coated	3s. 1d.	8s. 1½d.
Oiled paper, tracing paper, waxed paper, silver tinfoil, parchment, and its imitations, paper chemically prepared and sensitised		
Paper	—	12s. 2½d.
Tinfoil	2s. 0½d.	—
Waxed	1s. 7½d.	—
Chemical paper	8s. 1½d.	—
Others	3s. 3d.	—
Paper not otherwise mentioned, common with tissues	—	8s. 1½d.
Cardboard	1s. 0½d.	—
More than one colour	6s. 0d.	—
Wall Paper	9s. 0d.	14s. 3d.

Great Fire at Toronto.

A great fire broke out on Tuesday night in the wholesale district in the heart of Toronto. It continued to spread, and nearly all the buildings in its path have been reduced to ruins. Among the most prominent buildings destroyed are those of Messrs. W. R. Brock, Gordon, Mackay and Co., Barber and Ellis, Warwick Brothers and Rutter, Copp, Clark and Co., W. J. Gage and Co., Pusiey, Dingman and Co., Cockshutt and Co., Wyld and Darling, and Brown Brothers. The districts from Bay to York and from Bay South to Front have been devastated. The damage, it is estimated, will exceed £2,500,000.

DESTRUCTIVE FIRE. A destructive fire, supposed to have been caused by a spark from an engine, broke out in the goods yard at Houghton railway station, near Preston, last week. Damage estimated at £10,000 was done, a large warehouse being completely gutted, and large quantities of wood pulp, ropes, paper, china clay, etc., destroyed.

GAZETTE.

A WORD OF CAUTION.—In giving the official Gazette information, it must be distinctly understood that we take official records as we find them, and accept no responsibility for inaccuracies, while, as an almost invariable rule, the facts will be found correct. We advise our readers, before forming hasty judgment, to consider that there may be in each case a satisfactory explanation which does not appear on the record.—ED.

ENGLAND and WALES.

PARTNERSHIPS DISSOLVED.

BEATTY, O. H., STOAKLEY, W. H., and BAMFORD, W. H. C., trading as W. H. Stoakley and Co., newspaper proprietors and printers, 11, St. George's-road, Wimbledon, Surrey. Debts by W. H. Stoakley and W. H. C. Bamford, who will in future carry on the business. March 25th.

WRIGHT, E. J., and EMBLETON, P. C., trading as Wright and Cuthbertson, stationers, printers and account book makers, 9, Fenchurch-buildings, Fenchurch-street, London, E.C. Debts by E. J. Wright. March 31st.

MARCHMONT, F. and WINTERTON, H., trading as E. Marchmont, booksellers and publishers, 5s, Newington Butts, London, S.E. Debts by F. Marchmont, who will in future carry on the business. April 12th.

DISTRIBUTION OF ASSETS.

IN THE MATTER OF A DEED OF ASSIGNMENT for the benefit of creditors, executed November 3rd, 1903, by A. B. Limpus, trading as Green, Limpus and Co., 25A, High Holborn, London, W.C., printer. Claims by April 30th, to the Trustee, H. Button, C.A., 49, Queen Victoria-street, E.C.

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDERS.

BLOOMFIELD, W., 50A, Victoria-street, Great Grimsby, printer and publisher. Date of order and of adjudication order, April 11th, made on debtor's own petition. First meeting of creditors, April 27th, 11 a.m., at the official receiver's office, 15, Osborne-street, Grimsby. Public examination of debtor, May 5th, 11 a.m., at the Town Hall, Grimsby.

SEALE, A. A., 7, Elm-grove, Southsea, Hants, stationer and bookseller. Date of order and of adjudication order, April 7th, made on debtor's own petition. First meeting of creditors, April 28th, 3 p.m., at the official receiver's office, Cambridge Junction, High-street, Portsmouth. Public examination, May 30th, 11 a.m., at the County Court House, St. Thomas-street, Portsmouth.

FIRST MEETING AND PUBLIC EXAMINATION.

MCMULLEN, T., late trading as Fleming and Co., Gresham Buildings, and 17, Wool-exchange, Basinghall-street, London, E.C., late printer and stationer. First meeting, May 2nd, 2.30 p.m., and examination, May 20th, 11.30 a.m., both at Bankruptcy-buildings, Carey-street, W.C.

APPLICATION FOR DEBTOR'S DISCHARGE.

BRADLEY, E., Prospect House, High-street, Boston Spa, Yorkshire, stationer and newsagent. To be heard May 6th, 9.30 a.m., Courts of Justice, Clifford-street, York.

NOTICES OF INTENDED DIVIDENDS

SYKES, J. W., 1, Dane-street, Northwich, printer, [illegible] May 6th, at the office of Messrs. Cobbett and Co., 27, Brazennose-street, Manchester.

WEBB, F. E., Southgate, Wakefield, [illegible] Chancery Master's Office, 9, Offley, official receiver, 6, Bond-street, Wakefield.

NOTICES OF RELEASE OF TRUSTEES

PHILLIPS, E. L., 31, Leadenhall-street, London, E.C., [illegible] 21, Market-place, Southend-on-Sea, [illegible] Trustee, 9, Watford, [illegible] Released March 25th.

SMITH, G., 3, Strand, Barrow-in-Furness, printer, [illegible] official receiver, 16, Cornwallis-[illegible] Released March 31st.

THE COMPANIES ACTS, 1862 to 1900

NOTICE OF DIVIDEND.

THE BRIXHAM AND TORQUAY NEWSPAPERS [illegible] 5, Union-road, High-road, Lewisham, S.W. First and [illegible] 18, 3d., April 29th, at the official receiver's offices, 34, Railway-approach, London-bridge, S.E.

Digitized by Google

LIST OF ADVERTISERS.

Where number of page is omitted the advertisement does not appear in this issue.

Alkali, Etc. PAGE

Brunner, Mond & Co., Ltd. ... ... *Cover ii.*
United Alkali Co., Ltd. ... ...

Analysts, Experts, Engineers, &c.

Ekman, C. D. 33
Hurst, George H. 35
Sindall, R. W. 33

Belting, etc.

Sutcliffe Bros. ... ...

Boiler Coverings and Composition.

Emmett, James, Ltd. 33
Sutcliffe Bros. ... ...

Chemicals.

Bramwell, E., & Son ... ...
Brunner, Mond & Co., Ltd. ... ... *Cover ii.*
Pochin, H. D. & Co., Ltd. ... ...
Spence, Peter & Sons, Ltd. 9
United Alkali Co., Ltd. ... ...

Colours.

Cardwell, J. L., & Co. 35
Cornbrook Chemical Co. 33
Hinshelwood, Thos., & Co. 35
Levinstein, Ltd. 35
Manchester Aniline Co. 35
Pochin, H. D., & Co., Ltd. ... ...
Via Gellia Colour Co. 35

Dandy Rolls.

Green, W., & Son ... ...
Marshall, T. J., & Co. 19

Economisers (Fuel).

Green, E., & Son, Ltd. ... ... *Cover i.*

Engines (Steam).

Milne, James, & Son, Ltd , ...

Esparto Pulp.

Grondal, A. L. ... ...

Felts and Jackets (Papermakers').

Huyck, F. C., & Sons 13
Kenyon, James, & Son 11
Porritt, Joseph, & Son ... ...
Whitehead, R. R., & Bros., Ltd. ... ...

Mill Refuse, Treatment of.

Liquid Destructors, Ltd. 33

Minerals, Etc.

Belvoir and Newark Plaster Co. 35
Best, James, and Sons 35
Birch, W. Singleton, & Son, Ltd. 35
Bodelva and Lantern China Clay Works 35
Cafferata & Co. 35
China Clay Co. 35
Howe, John, & Co. 35
Lassale, Th. 35
Pochin, H. D., & Co., Ltd. ... ...
Rogers, J., & Co. 35
Satinite Co. ... ...
Varcoe & Sons 20
Winser & Co. 35

Miscellaneous.

Directory 35
Machinery for Sale and Wanted 19
Paper Mill Directory ... ...
Situations Vacant and Wanted 19

Oils and Lubricants.

Diamond Oil Co., Ltd. ... ...
Sutcliffe Bros 32

Office and Library Furnishers.

Simpole's 11

Paper and Pulp Making Machinery.

Bentley & Jackson, Ltd. ... ... 4—5
Bertram, James, & Son, Ltd. ... ... *Cover iii.*
Bertrams Ltd. 20
Dietrich, Robert ... ...

Paper & Pulpmaking Machinery—(Continued)

PAGE.

Füllner, H. ... ...
Lechla, O. ... ...
Marx, J., & Co. ... ...
Masson, Scott & Co., Ltd. ... ...
Milne, James, & Son, Ltd. 18
Voith, J. M. ... ...
Walmsley, Chas., & Co., Ltd. ... ...
Wandel, Chr. ... ... *Cover i.*
West End Engine Works ... ...
Wurster, Dr. C. 11
Wyss, Escher, & Co. ... ...

Paper Bag Machinery.

Bumsted & Chandler 33

Paper Stock.

Beaumont, J., & Co. 33
Bradford, John S., & Co. ... ...
Caldwell, J., & Sons 33
Chalmers, E., & Co., Ltd. 35
Freese, Jean 33
Goodhind, R. & J. 33
Hay, R. H., & Co. ... ...
Hyman Bros. ... ...

Rag Pulps, &c.

Courtelary Wood Pulp Works Co. ... ...

Roll and Plate Engravers, etc.

Fulton, John, & Co. 19

Sizing.

Grove Chemical Co., Ltd. 35

Strawboard Centres.

Boyd, Hart & Co. 35

Straw Pulp.

Grondal, A. L. ... ...
Vereinigte Strohstoff-Fabriken ... ...

Tools (Papermakers').

Makin, William, & Sons ... ... 7 and 35

Typewriters.

Remington Typewriter 13

Ventilators, Etc.

Sutcliff Ventilating and Drying Co. 35

Water Supplies.

Abundant Water Supply Co. 35
Isler, C., & Co. 35
Le Grand & Sutcliff ... ... 33 and 35

Wood Pulp.

Actiengesellschaft für Maschinenpapier-Fabrikation ...
Alsing & Co., Ltd. 35
Andrews & Co., Ltd. 20
Berner & Nielson 17
Forsmarks Cellulose Fabrik ... ...
Grant, W., & Co. 35
Grondal, A. L. ... ...
Hay, R. H., & Co. ... ...
Henderson, Craig & Co., Ltd. 13
Johnsen, Jorgensen and Wettre 24
Kommanditbolaget C. Fr. Waern & Co. 33
Lovenskiold-Fossum 27
Makin & Bancroft 17
Munds, Wilh. ... ...
Olrog, Thv. ... ...
Skutselv Cellulosefabrik 13
Storviks Sulfit Aktiebolag 13
Taylor, F. D., & Co. ... ...
Taylor, W. G., & Co., Ltd. ... ... *Cover i.*
Tilsit Zellstoff Fabrik 20
Wertheim, A., & Co. ... ... *Cover iv.*
Wood, Harry B. ... ...

PATENTS, INVENTIONS, &c.

READERS of this Paper who have an **Idea** for a **Patent**, or desire **Information** or **Advice** in connection with Inventions, &c., should communicate with the Patent Editor, who will supply full particulars direct by letter, free of charge.

Address: *The World's Paper Trade Review*, 58, SHOE LANE, LONDON, E.C., and write on the left hand corner of the envelope the word "Patents."

Digitized by Google

ALL KINDS of WOOD PULP.

AGENTS ONLY.

Digitized by Google

THE WORLD'S
Wood Pulp Industry.

A Weekly Record of the Latest Information of Interest to Manufacturers of Chemical and Mechanical Wood Pulps, Agents, Buyers, and Others.

LONDON: 58, SHOE LANE, E.C.

British Imports for the Week.

The arrivals of wood pulp at British ports during the week ended April 9th were as follows:—

Chemical—Dry.		
Norway	1,547 tons	£11,032
Sweden	1,022 ,,	7,731
Prussia	213 ,,	2,030
Holland	99 ,,	826
Russia	80 ,,	620
Germany	30 ,,	240
Finland	23 ,,	161
Chemical—Wet.		
Sweden	200 tons	£775
Norway	100 ,,	350
Mechanical—Dry.		
Norway	20 ton	£95
Mechanical—Wet.		
Norway	2,683 tons	£6,212

The Scandinavian Chemical Wood Pulp Market.

The Scandinavian Association of Chemical Wood Pulp Manufacturers held its annual meeting at Stockholm on the 11th inst., when there was a large attendance of both Swedish and Norwegian members.

It was reported that the consumption of cellulose had greatly exceeded expectations. At the previous meeting of the Association (October, 1903) there were large stocks, but at the present time they were practically nil.

The members of the Association reported that the present year's production had been almost sold, and that in regard to the production for 1905 the sales far exceeded those of any previous year.

On the question of prices the meeting considered the following should hold good for delivery next year, c.i.f. London:—Best bleached sulphite, £8 15s.; ordinary strong sulphite, £7 15s. to £8; and unbleached sulphate, £7 16s. It was considered that this year's production, unsold, should command higher prices.

Mention was made that the United States had this year imported sulphite instead of exporting as in previous years, and this was calculated to give firmness to the market for some time to come.

French Imports.

At Nantes last year, 21,020 tons of pulp wood and wood pulp were imported, a decrease of 8,610 tons compared with 1902 and a decrease of 7,796 tons compared with 1901. The supplies were from Russia, Sweden and Norway.

Canadian Rossed Pulp Wood.

A decision has been handed down by the United States Board of Appraisers which holds that rossed pulp wood imported from Canada into the United States is not subject to duty. No announcement has been made whether the Government will carry the case to the United States Courts of Appeal. The Government contended that rossed pulp wood should be subject to a duty, arguing that the rossing of the wood was in fact a manufacturing process. This contention, however, was held to be not well founded, for the reason that when the rossing was complete the log treated was yet pulp wood. There was no claim that peeled wood should pay a duty, on the ground that the peeling was one process of manufacture, and the board held that "rossing does not rise to the dignity of any sort of manufacture." The decision would seem to be well founded in tariff law, and those pulp makers who are importing their wood from Canada have special cause to feel elated over their victory. Those who are cutting their wood in the

Digitized by Google

States may, however, not be quite as enthusiastic on the subject.

American Exports.

THE United States exported wood pulp during February to the extent of 1,043,035 lbs. of the value of 21,888 dols., as against 905,695 lbs. valued at 18,396 dols. in the corresponding month of the previous year.

TAKING the eight months ended February last the total exports of wood pulp from the United States amounted to 25,022,761 lbs. of the value of 484,805 dols., as against 15,729,444 lbs. valued at 308,381 dols. in the eight months ended February, 1903.

Electric Driving of Works.

In the April number of *Technics* (George Newnes, Ltd.) will be found a number of valuable contributions. Dr. J. A. Fleming, F.R.S., writes on "The Education of Electrical Engineers in London" (part 2), whilst "The Modern Motor Car," is described by Wilfrid J. Lineham, M.I.C.E., M.I.E.E., M.I.M.E., illustrated from the author's diagrams, and "Some Laboratory Uses for Aluminium," are given by Edwin Edser, A.R.C.S. The contents include "Answers to Queries," recent inventions, and in the notes on the "Progress of Science and Technology," the following appears on the electric driving of works:—The conservatism of mechanical engineers respecting the introduction of electrical driving has frequently called forth adverse criticism from the more progressive American and Continental engineer, and it is satisfactory to learn that the older methods of mechanical driving are at last fast giving place to the more flexible and economical methods of electrical driving of machine tools and works. We are told that manufacturing firms were at one time sceptical on the subject, because electrical engineers claimed too much on behalf of electrical driving; as a contrast to this view, it is refreshing to be able to give the opinion of the manager of one of our largest firms, who recently gave utterance to the following remarks:—"Formerly there was a feeling of unwillingness to introduce electricity, on the part of engineers, because they regarded it as a complicated subject, and thought they would have some difficulty in acquiring it, and also that there would be danger to workmen in consequence of shocks from the high voltage. The prejudices have now, to a great extent disappeared, and *the engineer of ordinary ability finds in electricity a simple means of remedying extravagances in works more readily than by any other method, and consequently welcomes its introduction.*" In large works the introduction of a central power station removes great lengths of steam piping, which formerly was the cause of considerable loss from condensation; and in consequence, a considerable improvement in the efficiency of the plant has been effected, and by employing high pressure boilers there has been a gain of 50 per cent. in efficiency on this score alone, compared with the old conditions with low pressure boilers. The substitution of electricity for crane work has been one of the most useful object lessons, whilst the use of electricity in the driving of separate machines has been the means of informing tool makers what the actual horse power absorbed by the different classes of machines running light, or under certain conditions or loads, really was. The grouping of a small number of machines to one motor is advantageous up to a certain point, but much depends upon the class of work and the size of the machines; with grouping there is not much probability of extraordinary loads coming simultaneously on all machines; so that a smaller amount of motor power in the aggregate may be used than would be possible if the machines were driven separately, and each motor had to be powerful enough to withstand the possible overload from each machine. It is also now well recognised that in the case of large work it is more economical to bring the tool to the work than to take the work to the tool.

"THE SURVEY GAZETTEER OF THE BRITISH ISLES."—Messrs. Geo. Newnes, Ltd., are publishing under the above title a survey of British Topography, etc., edited by Mr. J. G. Bartholomew, F.R.G.S. The work will comprise twenty fortnightly parts at sevenpence (net) each. There will be given a complete index of all places of importance or interest in the country, and a descriptive and statistical summary of the geographical features of Great Britain and Ireland. The accompanying maps are a valuable feature of the publication.

WEIGHTS AND MEASURES BILL.—In the House of Commons, on Friday, Mr. Bousfield moved the Second Reading of the Weights and Measures Bill, which seeks to secure greater uniformity in the administration of the present system. One of its proposals was the abolition of the two systems of weight known as the troy and apothecary in favour of the metric system. In the course of discussion, strong objection was taken to this clause, which Mr. Bousfield consented to withdraw in Committee. The Bill, on this understanding, was read a second time and referred to the Standing Committee on Law.

METALS.—Under the date of Wednesday last, Messrs. I. and J. Hyman, metal merchants, Britannia-street, Kings-cross, quote (subject to market fluctuations) their prices for Old Scrap Metals:—

	Per Ton.
Clean Copper	£52 0 0
Tinned or Braziery Copper	49 0 0
Gun Metal	47 0 0
Brass	37 10 0
Old Zinc	17 0 0
New Zinc Cuttings	19 0 0
Lead (subject to usual 4-lbs. per cwt. tare) ...	11 2 6
Hollow Pewter	92 0 0

Digitized by Google

GERMANY.

A COMPANY has been formed to acquire the pulp board factory of Karl Friedrich Weber in Groitzsch, Saxony, with a nominal capital of 180,000 marks. The trading name will be Groitzscher Rohpappen Fabrik G. m.b. H.

—o—

AUSTRO-HUNGARY.

A DIVIDEND of 6 per cent. is announced by the Aktien Gesellschaft der K.K. priv. Pittener Papierfabrik, in Vienna.

—o—

SWITZERLAND.

SINCE the reorganisation of the Gesellschaft fur Holzstoffbereitung in Basel, prosperous times have been experienced. A dividend has recently been announced of 16 per cent., as against 13 per cent. in the previous year. Formerly the concern worked at a loss.

—o—

CRETE.

A RECENT report by the German Consul in Crete comments on the considerable amount of paper and cardboard imported there, Few of these goods come from Germany, but a considerable amount from Italy and Austria-Hungary. The cause of the increased demand for these articles is the establishment, under the direction of the Government, of numerous schools and communal offices, as well as the foundation of several newspapers. According to the Consul there is a good opening for packing paper, millboard, strawboard, brown cardboard for bootmakers, printing paper, note paper, envelopes, school exercise books, and also for ledgers of ordinary quality; the leaves and covers of these latter should be loaded with baryta, as they are sold by weight.

—o—

UNITED STATES.

THE International Paper Co. have entered into a contract for a term of years for the supply of paper for Mr. Hearst's publications in New York, Chicago and Boston. The contract is subject to adjustment or cancellation on notice. Mr. Hearst's requirements amount to about 400 tons of paper per day, or about one-third of the total news production of the International Paper Co.

"SHOPPERY RAGS."—A Boston paper stock merchant imported 83 bales of "Shoppery Rags." These were sold to a paper mill for 700 or 800 dols. The Custom House people subsequently demanded the payment of a duty of 1,400 dols., it being contended that the rags were satinette garments, and as they contained 38 per cent. of wool should be classified under paragraph 363 as woollen rags assessed at 10 cents per lb. The trade is anxiously looking forward to see if the Customs decision will be upheld.

SHIP CANALS IN GERMANY.—A Berlin telegram states that the Canals and Waterways Bills laid before the Lower House of the Prussian Diet consists of five measures. The new schemes include a Dortmund-Rhine Canal; a ship canal from the Dortmund-Ems Canal at Bevergern, to Hanover; and, finally, a canal for large vessels from Berlin to Stettin. It is also proposed to carry out improvements on the Oder and Vistula. Twenty million pounds is asked for these works.

W. AND J. SOMMERVILLE, LTD.—This company, being voluntarily wound up, creditors are requested to send particulars of their claims to the liquidator, Mr. John Cooper, 28, Budge-row, Cannon-street, London, E.C., on or before May 10th.

TRADE MARK.

LÖVENSKIOLD-FOSSUM,

SKIEN, NORWAY.

EXPORTER OF

Moist Pine Pulp.

Sole Agents for England and Ireland:—
HANS DESSEN & CO.,
2, Great Winchester Street, LONDON, E.C.

Sole Agents for Scotland:—
W. GRANT & CO.,
4a, St. Andrew Square, EDINBURGH.

Digitized by Google

MARKET REPORTS.

Telegrams—"STONHILL, LONDON."

Chemicals.

Trade steady. AMMONIA ALKALI, 58 per cent., stands at £4 10s. to £4 15s.; BLEACHING POWDER, soft wood, £4 5s. to £4 10s.; CAUSTIC SODA, 76-77 per cent., £10 10s. to £10 15s.; SODA CRYSTALS, £2 17s. 6d. to £3 2s. 6d.; and RECOVERED SULPHUR, from £5 5s. to £5 10s. ALUM unchanged.

Chemical Wood Pulps.

Market firm. There is more disposition, however, to meet buyers in regard to contracts over next year, although manufacturers report that fairly large sales have been made.

Mechanical Wood Pulps.

Business is somewhat checked, owing to the high prices demanded by sellers.

Esparto.

Demand somewhat limited, and distant business only possible by some modification from the prices quoted for earlier shipment.

The arrivals of ESPARTO at British ports during the week ended Saturday last were as under:—

Quantity	From	Importer	Port
215 tons	Almeria	Morris and Co.	Grangemouth
800 ,,	Arzew	,, ,,	Bristol
150 ,,	Oran	,, ,,	London
979 ,,	,,	Robert Hay & Co.	Granton
50 ,,	,,		,,
5,708 bales	,,		,,

Home and Foreign Rags.

LONDON: Trade steady at firm values.—BRISTOL: Moderate business; quotations unaltered.—MANCHESTER: All grades move off fairly well.—EDINBURGH: There is a keen demand for most grades of paper stock; particularly white and coloured rags. Some of the commoner qualities of paper are also in considerably improved demand, owing to the rise in wood pulp.—DUBLIN: Trade dull.

The exports of PAPER STOCK last week were:—To Africa, 18 tons; Belgium, 109 tons; Denmark, 5 tons; Egypt, 6 tons; France, 193 tons; Germany, 93 tons; Holland, 190 tons; India, 215 tons; United States, 289 tons.

In FOREIGN RAGS, French packers report a brisk demand, and German stock has been in better request of late; Dutch and Belgian exporters report a quiet market.

The receipts of FOREIGN RAGS at British ports during the week ended Saturday last were from the following countries:—Belgium, 693 bales; Channel Islands, 50 bales; Denmark, 226 bales; France, 2,507 bales; Germany, 819 bales; Holland, 249 bales; Italy, 191 bales; Japan, 183 bales; Norway, 11 bales; Prussia, 176 bales; Sweden, 7 bales; Turkey, 300 bales.

Sizing.

Trade rather better, but prices show a downward tendency.

Minerals, etc.

CHINA CLAY is in fair demand, and large quantities are being sold, particularly the best brands. A fair amount of business is being transacted in MINERAL WHITE at moderate prices, and FRENCH CHALK, SATINITE, and BARYTES are in good request.

Paper Stock.

Shipments to the United States.

The total imports of paper stock into the United States during February last were of the value of 197,840 dols., and for the corresponding month of the previous year 196,537 dols.

During the eight months ended February last the United States imported 1,790,366 dols. worth of paper stock, including 58,767,702 lbs. of rags of the value of 886,384 dols., and other goods to the value of 903,982 dols. During the corresponding period of the previous year the value reached a total of 1,788,673 dols., comprising 58,357,218 lbs. of rags valued at 943,626 dols., and other goods to the value of 845,047 dols.

The shipments of paper stock from the under-mentioned countries to the United States were as under:—

	July-Feb., 1902-3.	July-Feb., 1903-4.
United Kingdom ...	$692,285	$724,406
Belgium	195,170	201,103
France	158,415	192,054
Germany...	487,952	427,718
Italy	61,409	48,558
Other Europe	117,172	94,275
B. N. America	61,264	89,252
East Indies	427	—
Japan	1,752	—
Other countries ...	12,827	12,910
	$1,788,673	$1,790,366

THE ALKALI ACTS EXTENSION.—Various industries which in their trade processes emit more or less noxious fumes are apprehensive lest they be brought within the operation of the Alkali Acts. A Bill with this object was introduced by the Government in 1901, but not carried through to its later stages, and there is an expectation that a similar measure may be brought in this session. In view of this fact, a deputation of those concerned had a private conference at the House of Commons last week with Mr. Long, President of the Local Government Board, who was accompanied by Mr. Grant Lawson, the Parliamentary Secretary of that Department. Mr. Long promised duly to consider the various matters brought before him.

ADVERTISE in this paper! It pays!

Digitized by Google

Office of the WORLD'S PAPER TRADE REVIEW,
Telegrams: "STONHILL—LONDON." *58, Shoe Lane, London, E.C.*

CURRENT PRICES OF PAPERMAKING MATERIALS.

CHEMICALS.

Quotations are nominally as follows

Alkali, Ammonia, 58%	...	f.o.b. Liverpool	£4	10	0
,, ,, 48%	...	,, ,,	4	5	0
Alum (Ground), tierces	...	,, ,, 24%	5	10	0
,, barrels	...	,, ,, 24%	5	12	6
,, tierces	...	,, Hull 24%	5	5	0
,, ,,	...	f.o.b. Glasgow 24%	6	0	0
,, (Lump) barrels	...	,, ,, Liverpool 24%	5	0	0
,, tierces	..	,, ,, 24%	4	17	6
,, barrels	...	,, Hull 24%	4	17	6
Alum tierces	...	London 24%	5	7	6
,, ,,	...	f.o.b. Glasgow 24%	5	10	0
Alumina Sulphate Bags	...	f.o.b. Tyne net	3	10	0
Aluminoferric Cake, slabs	...	Liverpool	2	15	0
,, ,, tierces		,,	3	2	6
Alumina Cake, slabs	...	Glasgow	2	15	0
Blanc Fixe	...	f.o.b. Tyne net	5	15	0
Bleach	...	,, ,, net	4	7	6
,, (soft wood) ...	...	f.o.r. Lancs. net	4	7	6
,, (hard wood) ...	...	f.o.b. Liverpool net	5	0	0
,, (soft wood) ...	...	landed London net	4	15	0
Borax (crystals) ...	...	f.o.b. Liverpool net	13	0	0
,, (powdered) ...	...	... ...net	14	0	0
Caustic White, 76% ...	...	f.o.b. Liverpool net	10	10	0
,, ,, 74% ...	...	,, ,, net	10	5	0
,, ,, 70% ...	...	,, ,, net	9	15	0
,, ,, 70% ...	...	f.o.r. Lancs. net	9	12	6
,, ,, 60% ...	...	f.o.b. Liverpool net	8	15	0
Caustic Bottoms ...	...	f.o.r. Lancs. net	6	5	0
Chloride of Barium Casks		f.o.r. Hull net	6	5	0
Hypo-Sulphite of Soda	...	f.o.r. Tyne	5	7	6
,,	...	f.o.b. Tyne	5	7	6
Oxalic Acid	...	f.o.b. Liverp'l net	per lb.		2½
Salt Cake	...	f.o.b. ,,	1	17	6
Satin White	...	f.o.r Tyne	5	5	0
Soda Ash, Carbonated, 52%		f.o.b. Liverpool net	6	2	6
,, ,, 48% ...		,, ,, net	6	0	0
Soda Ash, Carbonated 52% ...		f.o.r. Widnes net	6	0	0
Soda Ash, Carbonated 48% ...		f.o.r. Widnes net	5	17	6
Soda Ash, Caustic, 48% ...		f.o.b. Liverpool	6	5	0
Soda Ash Caustic 52% ...		,, ,,	6	7	6
Sal Ammoniac (1sts) ...		f.o.b. Liverpool	42	0	0
,, (2nds) ...		,, ,,	40	0	0
Soda Crystals	...	f.o.b. Tyne net	3	2	6
,, ...	...	ex ship Thames 24%	3	5	0
,, ...	...	f.o.b. Liverpool 5%	3	7	6
Sulphate of Ammonia	...	,, ,,	12	7	6
Sulphate of Copper ...	...	,, Liverpool 5%	21	5	0
Sulphur, rolls ...	...	f.a.s. works net	6	7	6
,, flowers	...	,, ,, ,,	7	10	0
,, recovered	...	,, ,, ,,	5	10	0

FOREIGN CHEMICALS.

F.o.b. Continental Ports:

Bleaching Powder, 35%-37% casks	f.o.b. Antwerp	4	5	0
Hypo-Sulphite of Soda, casks	f.o.b. Rotterdam nett	4	15	0
White Sugar of Lead, casks	f.o.b. Hamburg ...	24	10	0
Sulphate of Alumina, 14%-15% casks	f.o.b. ...	3	7	6
Zinc Oxide	f.o.b. less 2½%	22	0	0

STRAW PULPS.

Prices, c.i.f. English and Scotch Ports.

German, dry, No. 1	£13	0	0
,, ,, No. 2	12	0	0
Dutch	11	0	0

CHEMICAL WOOD PULPS.

GREAT BRITAIN.

Prices, c.i.f. London, Manchester, Granton, etc.

Sulphite, Bleached	£11	10	0—12 0 0
,, Unbleached, 1st quality ...	8	15	0— 9 0 0
,, ,, Ordinary ...	8	5	0— 8 15 0
,, ,, 2nd quality ...	7	15	0— 8 0 0
Soda, ,, ... 1st quality ...	7	10	0— 7 15 0
,, ,, ... 2nd ,, ...	7	0	0— 7 5 0

FRANCE.

C.i.f. Rouen per 100 kilos. (2 cwt.).

Sulphite, Unbleached, 1st quality ...	Frs.	22—23
,, Ordinary		20—21
,, ,, 2nd quality ...		18—20
,, Bleached, Superior		30—32
,, ,, Inferior		28—29
Soda and Sulphate, Unbleached ...		19—20
,, ,, 2nd quality ...		18—19

UNITED STATES.

Sulphite, American, Bleached	2.40c— 2.50
,, ,, Unbleached ...	1.85 — 2.10
,, Foreign, Bleached	3 — 3.30
,, ,, Unbleached	1.95c— 2.15c
Soda, American, Bleached	2.12c— —
Soda, American Unbleached	2.50c— 2.60c
,, Foreign Bleached	2.55 — 2.85
,, ,, Unbleached	1.80 — 1.90

MECHANICAL WOOD PULPS.

GREAT BRITAIN.

Prices, c.i.f. London, Manchester, Preston, Granton, etc.:

Pine, 50% moist, prompt delivery ...		£2	2 6
,, ,, forward delivery ...		2	5 0
,, dry, prompt delivery ...	4 5 0—4	10	0
,, ,, forward delivery ...	4 15 0—5	0	0

FRANCE.

Prices c.i.f. Rouen, per 100 kilos. (2 cwt.).

Pine, 50% moisture	Frs. 11 —11.50
,, dry	11.50—12
Aspen ,, fine, dry	15.50—16.50
Brown (half-chemical), 50% moisture ...	10.50—12
,, ,, dry	11 —11.50

UNITED STATES.

F.o.b. Mill, nearest port (per 2,000 lbs.) ... ... 15 dols.

ESPARTO.

Prices ex-ship London, or f.o.r. Leith, Granton, Garston and Tyne Docks, are nominally as follows:—

Spanish—Fair to Good	£4	7	6—4	12	6
Fine to Best	5	2	6—5	7	6
Oran— Fair to Good	3	3	9—3	6	3
First Quality	3	8	9—3	12	0
Tripoli— Hand-Picked	3	8	9—3	10	0
Fair Average	3	3	9—3	5	0
Bona and Philippeville	3	10	0—3	12	6
Sfax and Gabes	3	8	9—3	10	0

ESPARTO PULP.

Prices, c.i.f. Rouen, per 100 kilos (2 cwt.).

First quality	Frs.	42. —43.
Second quality		40. —41.

Digitized by Google

FOREIGN RAGS.

FRENCH.

Quotations f.o.b. Rouen

Extra Linens	—	Blue Linen No. 1	8/0
White Linens, No. 1	22/0	Fustians	4/0
,, No. 2	17/0	Old Bagging (solid)	2/9
,, No. 3	14/0	,, (common)	1/0
,, No. 4	8/0	Hemp, tarred in coils	11/0
,, No. 5	4/6	Hemp strings	10/0
Gray Linens (strong)	13/0	NEW CUTTINGS.	
,, (extra)	16/0	White Linen,	33/0
White Cotton, No. 1	13/0	Unbleached Linen	30/0
,, No. 2	9/0	Gray Linen	23/0
,, No. 3	7/6	Extra White Cotton	19/0
,, No. 4	6/0	Ordinary ,,	18/0
,, No. 5	3/0	Curtain Cuttings	17/0
White Knitted	17/0	Stay ,,	15/0
Muslins	6/0	Extra Light Prints	13/0
Extra Light Prints	8/0	Unbleached Cotton	21/0
Light Prints	4/0	Oxford	12/0
Dark Prints	1/6	Flanellettes	15/0
Blue Cotton, No. 1	5/6	Blue Cotton	10/0

GERMAN.

Quotations are as follows

NWC	19/0	Dark Cottons	2/10
SPFFF	20/0	Grey Linens I.	11/10
SPFFF and SPFF	18/0	,, II.	7/0
SPFF	15/0	CSPFFF	13/10
SPF	12/0	CSPFF	9/10
Light Prints	7/0	CSPF	7/5
Fustians	3/10	Dark Blues (selected)	7/0
Mixed Coloured Cottons	3/10	Jute, No. I.	3/0
		,, No. II.	1/0

PRUSSIAN.

C.i.f. London, Hull, or Leith.

SPFF	13/6	CC (cotton)	3/0
SPF	9/0	Jute I	2/3
FG	8/0	,, II	1/6
LFB	6/3	Rope I	7/3
FF	3/0	,, II	4/3

BELGIAN.

Quotations, f.o.b. Ghent.

White Linens, No. 1	21/0	House Cloths	2/6
,, ,, No. 2	16/0	Old Bagging (solid)	3/0
,, ,, No. 3	12/0	,, ,, (common)	2/6
Fines (Mixed)	12/0	NEW.	
Grey Linens (strong)	9/6	White & Cream Linens	5/0
,, (extra)	14/0	White Cuttings	22/0
Blue Linens	8/0	Unbleached Cuttings	21/0
White Cottons No. 1	18/0	Print Cuttings	8/0
,, No. 2	15/0	FLAX AND HEMP WASTE.	
Outshots No. 3	10/0	Flax Waste, washed and dri	10/0
Seconds No. 4	7/9	Fair	8/0
Prints (Light)	7/0	Flax Card Waste	6/0
Fustians (Light)	3/6	Hemp Waste, No. 1	8/0
Fustians (Dark)	2/0	,, ,, No. 2	3/0
Black Cottons	3/0		
Hemp Strings (unt'r'd)	2/3		

DUTCH.

F.o.r. English ports.

Whites, No. 1	14/9	W. Manilla Rope (coils)	7/3
,, No. 2	9/9	do. Tarred ,,	4/9
,, No. 3	6/6	Canvas No. 1	14/0
Grey Linens	8/6	,, No. 2	10/0
Clean House Cloth	3/0	,, No. 3	6/0
Mixed Fustians	4/9	W. Untarred Rope	10/0
Coloured Prints	2/7½	Paper Shavings	
Dark Prints	2/1½	Free from wood	7/0
Blue Cottons	5/6	Mixed Bagging	2/7½
Light Lilac Cottons	7/0	Bright New Gunny	3/6
Muslins	9/9	New Bleached Cuttings	17/6
Mixed Hemp Rope Coils	8/3	Unbleached Cuttings	16/6
Broken (in bags)	6/0		

NORWEGIAN.

C.i.f. London, Hull, Tyne, and Grangemouth.

1st Rope (tarred)	8/3-9/0	2nd Canvas	7/6
2nd ,, ,,	5/0-5/9	Jute Bagging	
Manilla Rope (white)	10/6-11/0	Gunny	3/0-3/3
Best Canvas	11/9-12/0	Mixed	2/0-2/6

TURKISH.

F.o.b. Constantinople (per 100 kilos)

Whites, 1st	Francs 10	Ropes, Thick	Francs 10
,, 2nd	,, 5	,, Medium	,, 12
Coloured	,,	,, Thin	,, 15

STRAW.

Oat, ex steamer Thames	£1 7 6
Wheat ,, ,,	2 2 0

HOME RAGS.

LONDON.

N. White Cuttings	21/6-26/0	Canvas No. 1	14/0-15/0
Fines (selected)	19/6-21/0	,, No. 2	9/6-10/0
,, (good London)	17/0-17/6	,, No. 3	5/0
Outshots (selected)	10/0-13/0	Mixed Rope	2/9-3/3
,, (ordinary)	8/0-9/0	White Rope	4/0-6/6
London Seconds	1/6-1/9	White Manilla Rope	8/6-9/6
Country ,,	3/0-7/0	Coil Rope	8,0
London Thirds	0/9-1/3	Bagging	1/3-1/9
Country ,,	2/0	Gunny	2/6-2,6

BRISTOL.

Fines	17/6	Clean Canvas	13/6
Outshots	9/0	Second ,,	9,6
Seconds	5/0	Light Prints	6/6
Thirds	2/6	Hemp Coil Rope	9,0
Mixed Bagging	2/6	Tarred Manilla	7,0

MANCHESTER.

Fines	14/0-15/0	Blues	3/6-4/0
Outshots (best)	8/6-9/6	Bagging	2/3-2,6
,, (ordinary)	7/6-8/0	,, (common)	1/6-2/0
Seconds	4/0-4/6	W. Manilla Rope	5/0-10/0
Thirds	2/0-2/3	Surat Tares	2'9-3·0

EDINBURGH.

Superfines	15/0	W. Manilla Rope	9/6-10/0
Outshots	12/0	Tarred Manilla Rope	6/0
Mixed Fines	14/0	,, Hemp Rope	8/0
Common Seconds	8/0	Rope Ends (new)	5·0
First ,,	11/0	,, (old)	3/0
Prints	6/0	Bagging	2/0-2/3
Canvas (best)	14/0	,, (clean)	3/0-4/0
,, 2nd	9/0		
Black Cottons	2/0		

GLASGOW.

Fines	12/6-16/0	Canvas No. 1	15/0
Blues	4/6	,, No. 2	10/0
Common Blues	2/3	Manilla Rope	8/0
Bagging	4/0	Tarred Hemp	9/0

DUBLIN.

White Cuttings	16/0	Mill Bagging	2/6
Fines	9/0	White Manilla	8'0
Seconds	4/6	Tarred Hemp	6'0
Light Prints	1/6	Rigging	11·0
Black ,,	1/0		

JUTE.

Good White	£17	0	0	—	19	0	0
Good	14	10	0	—	16	10	0
Medium	12	0	0	—	13	0	0
Common	11	0	0	—	12	0	0
Rejections	9	10	0	—	10	0	0
Cuttings	5	0	0	—	8	0	0

WASTE PAPERS.

Cream Shavings	9/0	Small Letters	3/9
Fine ,,	8/0	Large ,,	5/0
Mixed ,,	4/3	Brown Paper	2/3
White Printings	7/9	Light Browns	3/9
White Waste	3/0	Dark ,,	2/6
Wood Pulp Cuttings	3/3	Books & Pamphlets	3/9
Blue Paper	2/0	Strawboard Cuttings	1/3
Crushed News	3/0	Jacquards	2/0

For Export 25s. per ton extra.

BALING TWINE.

Hemp	4½d. per lb.	5d. per lb	5½d. per lb.
Mixed	4½d. ,,	4¾d. ,,	5d. ,,

STARCH.

F.o.r. London, less 2½%

Maize—	Crisp	£10	15 0
	Pearl	10	10 0
	Powder	11	0 0
	Special	11	10 0
Farina—	Prime	10	10 0
	B.K.M.F.	14	0 0

Delivered :

Rice—	Special (in chests) net	19	10 0
	Crystal (in bags) less 2½%.	18	10 0
	Granulated in bags) ,,	17	10 0
	Waste ,,	13	0 0
Dextrine—		14	0 0

ROSIN.

Quotations (ex-wharf less 2½% discount) are as under :—

B/C	D	E	F	G	I	K	M	N	WG	W W
7/6	7/7½	7/9	8,0	8/1½	8,6	9/0	10/6	11/0	11/6	12/0

Digitized by Google

SIZING.

Prices are nominally as under:—

English Gelatine	Per cwt.	£3	0	0—4	10 0
Foreign ,, ...	,,	3	0	0—4	10 0
Fine Scotch Glues	,,	2	6	0—3	10 0
Best Long Scotch Glues ...	,,	1	10	0—2	0 0
Common Black	,,	1	13	0—2	0 0
"Town" Glues	,,	1	0	0—1	5 0
"Bone" Glues	,,	1	5	0—1	10 0
Foreign Glues	,,	1	0	0—1	5 0
Bone Size	,,		5	0—	8 0
Gelatine Size	,,		8	6—	10 0
Dry B.A. Pieces	,,	2	5	0—3	10 0
,, English Pieces	,,	1	10	0—2	0 0
Wet ,, ,, ...	,,		8	6—	9
,, Sheep Pieces	,,		3	0—	4 0
Buffalo Hide Shavings ...	,,	1	10	0—2	8 0
,, Picker Waste ...	,,	1	12	0—1	16 0

COLOURS.

Nominal Prices.

Mineral Black	Per Ton	£3	10 0
Black Peerless	,,	56	0 0
Ochre (English and Irish)	,,	*3	15 0
Ochre (French)	,,	*4	0 0
Pure Crawshay Turkey Red ...	,,	22	0 0
Red Oxide and Venetian Red ...	,,	*4	0 0
Umber (Derbyshire)	,,	*4	0 0
,, (Irish)	,,	2	0 0
Chrome (Pure)	Per Cwt.	2	10 0
Yellow (Imperial)	,,	0	14 0
,, (Bordeaux)	,,	0	12 6

*Higher Prices according to strength and shade.

PASTE COLOURS, with 40% of Colour (less 2½ d/d.)

Orange Pulp...	Per Cwt.	2	10 0
Golden Yellow Pulp	,,	1	16 0
Lemon Yellow Pulp	,,	1	16 0
Prussian Yellow	,,	1	16 0
Green (free from Arsenic)	,,	1	16 0
Paste Blue, 20%	,,	0	18 0
,, 33⅓%	,,	1	4 0
,, 40%	,,	1	8 0

LIME.

Per ton, f.o.r. works 1c/-

LOADINGS, etc.

China Clay, in bulk, f.o.b. Cornwall, 8s. 6d. to £1 5s. 6d. (highest grade) per ton, bags 5s., and casks 9s. per ton extra; delivered Lancashire, £2 (for best papers), and commoner qualities 22/ to 36/ per ton.; best f.o.r. London, in casks, £2 7s. 0d. per ton; f.o.b Liverpool, in 5 cwt. casks, £2 to £2 5s. 9d. for export.

French Chalk, W.E., W.O., and other brands, £2 17s. 6d. to £4 8s. 0d. per ton, according to quality, delivered in most Yorkshire and Lancashire towns, also f.o.b. Glasgow, Belfast and London.

Italian Chalk, finest brands—f.o.b. Manchester, Liverpool, or London—I.W.A., "Portland Mills," and "Swan" marks, £4 to £5 per ton of 10 bags.

Agalite, in bags, c.i.f. U.K. ports, £3 to £3 10s. per ton.

Paper Makers' Plaster, 14/ per ton and upwards delivered.

Superfine Hardening, delivered Mills, 50/ per ton and upwards.

Patent Hardening (2 ton lots), f.o.r. Lancs., £2 19s. 6d.

Mineral White (also known as Terra Alba, and Sulphate of Lime), per ton f.o.r. or boat at makers works:—

Superfine, best picked white, finely ground	18/ — 28/
Superfine, second quality	
Pottery, best quality	
Pottery, No. 2 quality	

Gypsum

Light Pink	6/6 — 16/
Seconds	
Brown	
Thirds, selected	

Terra Alba and Gypsum delivered any Lancashire or Yorkshire station about 10/ per ton extra, except Manchester, which is only 8/ per ton extra. Delivered London stations about 7/ per ton extra.

Bauxite, minimum alumina, 60%, 17s. f.o.b.

Sulphate of Alumina, £3 15s. 0d. to £4 12s. 6d. per ton delivered to Mills.

Sulphate of Barytes, No. 1, £3 4s. 0d.; No. 2, £2 12s. 6d No. 3, £2 2s. 0d.; No. 4, £1 15s. 0d. per ton, less 3½%.

Magnesite (containing 98% Carbonate of Magnesia), raw ground, £4 10s. 0d.; calcined, £8 10s. 0d.

Magnesite (in lump), £1 19s. 6d. per ton.

Satinite, £3 4s. 6d., in casks, f.o.b. Liverpool or Manchester.

Chloride of Zinc, £6 18s. 6d. per ton.

Books for Papermakers.

"ART OF PAPERMAKING," by ALEXANDER WATT. A practical handbook on the manufacture of paper, etc. 7s. 6d.

"CELLULOSE," by CROSS and BEVAN. An outline of the chemistry of the structural elements of plants. 12s.

"CELLULOSE, RESEARCHES ON," by CROSS and BEVAN. 6s.

"DYEING OF PAPER PULP," by JULIUS ERFURT. Translated into English by JULIUS HUBNER. A practical treatise for the use of papermakers and others. German edition, 12s. 6d. English edition, 15s.; Posted abroad, 20s.

"DIRECTORY OF PAPERMILLS, 1904." A list of the papermills in the United Kingdom, also of London wholesale stationers and the paper stainers of Great Britain. 2s. 6d.

"DIRECTORY OF FRENCH AND FOREIGN PAPER & BOARD MANUFACTURERS," 1903. This directory (in French) contains a list of papermakers, paper merchants, booksellers, etc., and articles on technical subjects. 9s. 3d.

"FACTORY BOOKKEEPING FOR PAPER-MILLS," by JOSEPH MACNAUGHTON. A system devised to meet practical requirements. 10s.

"NORDISK PAPPERS KALENDER, 1902." Scandinavian pulp and paper trade Directory. 4s.

"PAPERMAKERS' DIRECTORY OF ALL NATIONS," 1903. The only work of the kind in English. Crown 8vo., crimson cloth, 10s. 6d.

"PRACTICAL PAPERMAKING," by GEORGE CLAPPERTON. A manual for papermakers and owners and managers of papermills. 5s.

"PAPERMAKERS' POCKET-BOOK," by JAMES BEVERIDGE. Concise information relating to engineering, chemical, and office and papermaking departments of the mill. 10s.

"PAPERMAKING," by CROSS and BEVAN. A text book of principles, presenting the subject to the reader according to its scientific perspective. Second edition, 12s. 6d.

"PRACTICAL TESTING OF RAW MATERIALS," by S. S. DYSON. 12s. 6d.

"SAMPLING OF WOOD PULP," by R. W. SINDALL. Methods of sampling for moisture tests. 2s.

"STAMPELBOK," by K. VON HOFSTEN. Book of the trademarks of the chemical and mechanical wood pulp mills in Sweden and Norway, in the English language. Edition for 1902. 21s.

"TABLES OF WEIGHT OF PAPERS" for ascertaining the weight of paper in grammes per square metre from different sizes of Paper in reams of 480 and 500 sheets; in English, French, and German. 2s. 6d.

"BULLETIN JOURNAL DES FABRICANTS DE PAPIER," a bi-monthly French paper trade journal. Annual subscription, £1 4s., including postage. A good Continental advertising medium, rates on application to the Sole British Agents as under.

Any of the above may be obtained, post free, on remittance with order to

W. JOHN STONHILL & CO.,
58, SHOE LANE, LONDON, E.C.

Digitized by Google

AMERICAN IMPORTS OF

Paper, Paper Stock, Chemicals, &c.

The following is the latest weekly list, compiled from official returns, of American imports from the ports mentioned :—

Paper.

ANTWERP.—New York : 4 cases, Campbell and Co. : 9 cases, W. Seyd ; 3 cases, Wells, Fargo and Co. : 12 cases, Kupfer Bros. ; 6 cases, Sheldon and Co. : 35 cases, Japan Paper Co. ; 15 cases, G. Gennert : 6 cases, Bainbridge and Co. : 1 case, Knauth, Nachod and Kuhne : 3 cases, L. C. Wagner. Boston : 35 cases, Pollack Bros. ; 5 cases, Lee, Higginson and Co. : 21 cases, Munderloch and Co. Philadelphia : 15 cases, Hartung and Co. ; 48 cases, C. Beck Paper Co.

BREMEN.—New York : 11 cases, Kupfer Bros. : 3 cases, Sheldon and Co.

HAMBURG.—New York : 19 cases, Zinckeisen and Co. : 42 cases, 191 rolls, Dingelstedt and Co. : 48 packages, A. Kraut ; 3 cases, Knauth, Nachod and Kuhne ; 67 cases, Dejonge and Co. ; 5 cases, Richard and Co.

LIVERPOOL.—New York : 313 cases, American Tobacco Co. ; 14 cases, Haines and Co. : 10 cases, B. and O. Meyers. Boston : 5 cases, Lee, Higginson and Co. ; 3 cases, Lauriate and Co. : 47 cases, Gage and Co.

ROTTERDAM.—New York : 20 cases, Amsinck and Co. ; 32 cases, Dingelstedt and Co. ; 12 cases, Dejonge and Co. ; 7 cases, Sheldon and Co. : 36 cases, Hensel Bruckmann and Lorbacher ; 4 cases, Wells, Fargo and Co. : 12 cases, Wakum and McLaughlin.

HULL.—New York : 12 cases, Walter Mial.

Manillas.

LIVERPOOL.—New York : 28 bales, Castle, Gotthell and Co.

LONDON.—Boston : 52 coils, Lyon and Co.

Rags.

ANTWERP.—Philadelphia : 37 bales to order. Boston : 208 bales, Reis and Co. ; 120 bales, Wolf and Son.

CENTRAL AMERICA.—New York : 30 bales, C. Harley.

HAMBURG.—New York : 20 bales, F. Salomon and Co.

HULL.—Boston : 28 bales, Butterworth and Co. : 138 bales, Salomon and Co. ; 180 bales, Tuke and McClelland ; 130 bales, Castle, Gotthell and Co.

LONDON.—New York : 48 bales, Castle, Gotthell and Co. Boston : 41 bales, Warren and Co.

LIVERPOOL.—Boston : 80 bales, Bishop Manufacturing Co. ; 134 bales, Butterworth and Co.

MANCHESTER. Boston : 222 bales, Butterworth and Co.

ROTTERDAM.—New York : 22 bales, Castle Gotthell and Co.

ROTTERDAM. Philadelphia : 206 bales, to order. 100 bales, Baring Bros. and Co.

ANTWERP. Philadelphia : 25 bales, to order.

Waste Paper.

GLASGOW.—Boston : 101 bales, Crocker, Burbank and Co.

HULL.—Boston : 46 bales, Crocker, Burbank and Co.

LIVERPOOL.—New York : 44 bales, Butterworth and Co. ; 59 bales, Lyon and Co. Philadelphia : 167 bales, Brown Bros. and Co.

LONDON.—Boston : 183 bales, Lyon and Co.

ROTTERDAM.—Philadelphia : 200 bales, to order.

Wood Pulp.

ANTWERP.—New York : 488 bales, 100 tons, R. Helwig.

COPENHAGEN.—New York ; 200 bales, 25 tons, Castle, Gottheil and Co. ; 1,015 bales, 125 tons, Bertuch and Co.

HULL.—Boston : 646 bales, Page, Newall and Co. ; 212 bales, Aspergrain and Co.

Bleaching Powder.

ANTWERP.—New York : 50 casks, to order. Philadelphia : 65 casks, to order.

LIVERPOOL.—New York : 24 casks, Wing and Evans ; 301 casks, J. L. and D. S. Riker ; 43 casks, Arnold Hoffmann and Co. Philadelphia : 158 casks, J. L. and D. S. Riker.

Caustic Soda.

LIVERPOOL.—New York : 50 drums, J. L. and D. S. Riker.

Sizing.

HULL — Boston : 161 bags, Butterworth and Co.

LIVERPOOL.—New York : 246 bags, Gardner and Bro. Boston : 74 bags, Butterworth and Co.

LONDON.—Boston : 120 bags, Train, Smith and Co. : 117 bags, Butterworth and Co.

China Clay.

LIVERPOOL.—New York : 100 casks, Perry, Ryer and Co.

Sulphite Pulp.

COPENHAGEN.—New York : 420 bales, 60 tons, Lyon and Co.

Cannot CUT, CLOG, FLY or DRY.
Always uniform and pure. Most reliable.

"CLIMAX" WHEEL GREASE

Extensively used and admitted as the "BEST WHEEL GREASE EVER USED."

The "CLIMAX" LUBRICATING CREAM

For all kinds of Engines, Shafting, &c. Supersedes Oil. Saves 25 to 75 per cent. every year. No dirt, no waste, no attention, no heated Bearings. Perfect Lubrication. A trial will prove.

SUTCLIFFE BROS., Albert Works, Godley, near Manchester.

Digitized by Google

BUSINESS CARDS.

Rates for Weekly Insertions of announcements of this character may be obtained on application to W. JOHN STONHILL & CO., 58, Shoe Lane, London, E.C.

JEAN FREESE,
Dealer, Importer, Agent.
China Clay,
Paper Stocks,
Sulphite Pulps,
Bleaching Powder.
310, Vanderbilt Building,
132, Nassau Street,
NEW YORK CITY.

☛ Correspondence Solicited. ☚

WATER SUPPLIES
NORTON'S PATENT
Abyssinian and Artesian Tube Wells.
LE GRAND & SUTCLIFF,
Hydraulic Engineers,
Magdala Works, Bunhill Row, London

IMPORTANT TO STEAM USERS.
Boiler Composition
For Removal of Scale in Steam Boilers.
MANUFACTURED BY
JAMES EMMETT, Ltd., Reuben Street, LEEDS.

R. & J. GOODHIND, Templar Street, LEEDS,
WHOLESALE
Rag and Paper Stock Merchants.
ALL KINDS OF COTTON & WOOLLEN RAGS, NEW RAGS, BAGGING, &c.
Large Quantities of Clean Unread Newspapers always in Stock. TELEPHONE 797.

JOHN CALDWELL & SONS, Nat. Tel 390. T. A.: "Fents."
SUN MILLS, ANCOATS, MANCHESTER,
Wholesale Rag and Paper Stock MERCHANTS.
Buyers of Shirt Cuttings, Underclothing Cuttings, Tailors' Cuttings; also all grades of New Rag Cuttings
Warehouse Print Tabs, Fents, Twines, &c.
Terms—CASH. Bankers—L. & Y. Bank, Shudehill.

R. W. SINDALL, F.C.S.,
15, Borough High St., London, S.E.
ANALYST and CHEMICAL ENGINEER . .
WOOD PULP and PAPER TRADE EXPERT.
THE EXAMINATION OF PAPERS A SPECIALITY.

Telegraphic Address:—"RELIABLE." National Telephone, 1977.
J. BEAUMONT & CO.,
Wholesale Rag & Paper Stock MERCHANTS.
ALL GRADES OF COTTON RAGS, NEW RAGS, BAGGING, Etc.
Pump St., Oldham Road, MANCHESTER.

PAPER BAG MAKING MACHINERY
Latest Improvements.
BUMSTED AND CHANDLER,
Cannock Chase Foundry, Hednesford, Staffs.

C. D. EKMAN,
GRAVESEND,
Chemical Engineer,
SULPHITE PULP and PAPER TRADE EXPERT.
SCANDINAVIAN BUSINESS A SPECIALITY.

CORNBROOK CHEMICAL Co.,
STOCKPORT LIMITED,
(Successors to ROBERTS DALE & Co., Manchester & Warrington)
DRY & PULP COLOUR MANUFACTURERS
For the PAPER TRADE.
Paste Blues, Chromes, etc.
Any sample matched. Enquiries solicited.

BF V **BLEACHED SULPHATE,**
Kommanditbolaget C. Fr. Wærn & Co.,
GOTHENBURG.

LIQUID DESTRUCTORS, Limited,
122, George Street, EDINBURGH.
TOTAL DESTRUCTION of SEMI-LIQUID REFUSE.
☛ ENQUIRIES SOLICITED. ☚

Digitized by Google

BRITISH IMPORTS of CHEMICAL and MECHANICAL WOOD PULP

For the Week Ended April 9th, 1904.

[illegible] BRITISH WOOD PULP ASSOCIATION.

[illegible] Account of the [illegible] Quantities and Values of Chemical and Mechanical Wood Pulp imported at the various ports of the United Kingdom.

CHEMICAL—DRY.

Date.	Vessel.	From.	[illegible]	Packages.	Quantity.	Value.	Importer.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible] bale	16	[illegible]	[illegible]
				[illegible]	6	60	
		[illegible]	[illegible]	[illegible]	6	60	Becker & Co.
		[illegible]		[illegible]	6	60	
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Henderson, [illegible] & Co.
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	W. [illegible]
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
			[illegible]	[illegible]	[illegible]	[illegible]	[illegible] Paper Mills, Ltd.
		[illegible]		[illegible]	4	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Wilson, [illegible] & Co.
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Wilson, [illegible]
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Henderson, [illegible] & Co.
				[illegible]	[illegible]	[illegible]	Becker & Co.

[illegible]

CHEMICAL—WET.

[illegible]

MECHANICAL—DRY.

[illegible]

MECHANICAL—WET.

[illegible]

Digitized by Google

DIRECTORY.

Names and Addresses under these Headings will be charged for at the rate of 50/- per annum (52 insertions) for each card of two lines or under. Each additional line £1 per annum extra. Fresh headings are inserted when necessary.

ABYSSINIAN TUBE WELLS.

LE GRAND & SUTCLIFF, 125, Bunhill Row, London, E.C. . . . . Artesian Well Engineers.

ANALYSTS.

HURST, GEORGE H., F.C.S., 22, Blackfriars Street, Manchester. Speciality—Wood Pulp Sampling.

ARTESIAN WELLS.

ABUNDANT WATER SUPPLIES Co., apply to C. Isler and Co., Bear Lane, Southwark, S.E

ISLER, C. & Co., Bear Lane, Southwark, London, S.E.

CHINA CLAY.

BEST (JAMES) & SONS, Stoke-on-Trent. Specially Prepared China Clay for Papermakers. Stocks at Runcorn and Preston. Mines—Cornwall.

BODELVA & LANTERN CHINA CLAY Works. Stocks at Runcorn. Address J. Fletcher Pagan 88, Rumford Place, Liverpool. 7883

CHINA CLAY Co., 4, St. Ann's Square, Manchester. Mines: St. Austell, Cornwall. Stocks: Manchester, Preston, Runcorn, Leith. 8855

ROGERS, J. & Co., Truro, Cornwall.— Agents, W. G. Taylor and Co., Ltd., 83, Queen Victoria Street, London, E.C., and 29, St. Andrew's Square, Edinburgh.

W. SINGLETON BIRCH & SONS, Ltd., 15, Upton Street, Manchester. Mines: Rosevear, St. Austel., Cornwall.

COLOURS.

CARDWELL, J. L. & Co., Cromwell Buildings, 11, Blackfriars Street, Manchester. Specialities: Mineral Black, Ven. Red, Ochres, and Umbers.

HINSHELWOOD, Thos., & Co., Glasgow. Manufacturers of High-Grade Colours of all classes. Samples submitted or matched on application.

LEVINSTEIN LIMITED, Crumpsall Vale Works, Manchester. Warehouse, 21, Minshull Street. Manufacturers of Specialities for Paper dyeing in all shades. Blackley Blues, Scarlets, &c. Whitcol P.A. for sizing.

The VIA GELLIA COLOUR Co., Matlock- Bath. Colours in every variety. Mineral Black. Washed Golden Ochres and Umbers. Enquiries solicited.

MINERAL WHITE.

BELVOIR, Newark-upon-Trent. The first makers in Newark, 1850.

CAFFERATA & Co., Newark-upon-Trent. Established over 40 years. Largest makers of Mineral White in the Kingdom.

HOWE, John & Co., Carlisle.

RAGS.

CHALMERS, E. & Co., Ltd., Bonnington, Leith

SIZING, etc.

The GROVE CHEMICAL CO., Ltd., Appley Bridge, near Wigan, Lancashire. Glues, Gelatine, Size, Albumenoid, Dextrines, Farina, Starch, Painters' Glue, etc.

STEEL & BRONZE TOOLS.

MAKIN, Wm. & SONS, Sheffield, Estab- lished 1736. Roll Bars, Plates, Cutter Knives, Doctor Blades, etc.

STRAWBOARD CENTRES.

BOYD, HART & CO., Makers of Round, Square, and Square Centre Shells, 21, Exchange Square, Glasgow. Telegraphic address: "Strawboard." 9341

TALC.

LASSALLE, TH., Montlucon, France.

GYPSUM & TERRA ALBA.

WINSER & Co. (GOTHAM Co., LTD.), 312, Deansgate, Manchester, and Kegworth Mills, near Derby. Established over 40 Years

VENTILATING AND INDUCED DRAUGHT FAN MAKERS.

SAVE ON YOUR COAL BILL by using our Induced Draft Fan. At Oldham with three Boilers we are doing work that previously required four, and saving £28 a month in fuel. Write for particulars—SUTCLIFFE VENTILATING AND DRYING CO. Ltd., Cathedral Corner, Fennel Street, Manchester, Telephone No. 3920. Telegraphic Address: "VENTILABRO."

WOOD PULP.

ALSING & Co., Ltd., 110, Cannon Street, London, E.C. Agents for the well-known "K.K." Soda Pulp; also Sulphite and Mechanical.

GRANT, W. & Co., 4a, St. Andrew Square, Edinburgh. Agents for best shippers, Sulphite and Sulphate, Mechanical, Pine, Brown, Aspen.

WERTHEIM, A. & Co., Hamburg.

THE MANCHESTER ANILINE Co.,

20, High Street, Manchester.

SPECIALITIES:

MAGENTA, VIOLET, GREEN, METANIL YELLOW.

Mill-Hand Edition.

A Special Edition of *The World's Paper Trade Review* is published for supply only to bona-fide employees in Paper Mills.

The Annual Subscription is 6s. 6d., or 3s. 3d. for six months, PAYABLE IN ADVANCE.

New subscriptions are not accepted for any less period than six months, and must terminate at the end of a quarter, i.e., the last week in March, June, September, or December, and not at odd periods. Foreign subscribers must add, when remitting, the extra postage, i.e., 1s. 1d. for six months, or 2s. 2d. for the year.

The receipt of a copy in a COLOURED WRAPPER denotes the termination of a subscription.

Offices: 58, Shoe Lane, London, E.C.

Digitized by Google

THE PROPOSED AMENDMENT OF THE

Existing Factory Acts.

A measure that may have far reaching consequences to the smaller class of employing firms—should it become law—has been introduced by Mr. Tennant, and backed by Captain Norton. Its aim is to place the smaller factories and workshops on the same level as the larger ones, and applies to the former the regulations as to means of escape from fire and to the fireproof construction of staircases, etc., that at present apply to the latter class of establishments. This means the provision of stone staircases, fireproof walls, iron ladders and other things that will run the unfortunate employer who has but a few men or girls in his shop into heavy expense, or may mean, perhaps, an entire closing up of his business if he has not the capital to execute the necessary structural alterations.

As the law stands, all factories commenced after January, 1892, in which more than forty persons are employed, and all workshops commenced after January 1st, 1896, in which more than forty persons are employed, must be certified by the District Council as being provided with such means of escape from fire as are reasonably necessary. The new Bill proposes to repeal the words "and in which more than forty persons are employed," and so to extend the provisions of the Factory and Workshop Act, 1901, to factories and workshops of any size. And it further proposes to impose a fine not exceeding £1 a day for non-compliance with the requirements of the Council, instead of non-compliance with the requirements of a court of summary jurisdiction. Power is given to the County Court to make the owner contribute to the expenses of complying with these requirements. The Bill also proposes that the owner of every such factory or workshop, if begun after January 1st, 1905, and also of any such factory or workshop in which substantial alterations or additions are to be made, is to submit to the District Council drawings on tracing linen showing the means of escape from fire, under a penalty not exceeding £5.

The law at present provides that all factories begun before January 1st, 1892, in which more than forty persons are employed, and all workshops begun before January 1st, 1896, and in which more than forty persons are employed, may be required by the District Council to provide such means of escape from fire as are reasonably necessary; but there is provision for an arbitration in the case of dispute, sec. 14 (2) and (3). The new Bill proposes to repeal the words "and in which more than forty persons are employed," and gives power to the District Council to demand complete plans, which must be submitted under a penalty not exceeding £5. Some slight alterations are also suggested in the provisions as to arbitration, which would make them less favourable to factory owners. Power is also given to the District Councils to regulate the position, and the nature of, lift-wells, holes, or shafts.

Where premises are occupied by different persons, and any portion is a factory or workshop, sec. 14 (2) of the Factory and Workshop Act, 1901, which relates to the provision of means of escape from fire in case of factories begun before January 1st, 1892, and workshops begun before January 1st, 1896, is to apply to the whole premises, instead of only to the part which is a factory or workshop as at present, and power is given to the County Court to make the owner compensate any occupier for interference. Power is also to be given to a court of summary jurisdiction on complaint by a District Council, and on being satisfied that any premises used in part or in whole as a factory or workshop cannot be provided with adequate means of escape from fire, to prohibit their use as a factory or workshop, under a penalty not exceeding £2 a day.

Liens Registered.

ART COMPANY, LTD., LONDON, W.—Lien registered March 30th, for £600 six per cent. first mortgage debentures, part of £3,000; amount previously issued, £1,800; no trustees; charged on the undertaking and all the property, including the uncalled capital.

BOROUGH OF HORNSEY AND THE HARRINGAY PRESS, LTD.—Lien registered March 31st, for £200 three per cent. debentures; holder: London and Provincial Bank, Ltd.; charged on all the property, including the uncalled capital.

PICTORIAL PRINTING AND PUBLISHING CO., LTD., SOUTHAMPTON.—Lien registered March 30th, for £200 ten per cent. second debentures; no trustees; charged on the undertaking and all the property, present and future.

ADROIT PUBLISHING CO., LTD., LONDON, E.C.—Lien registered March 31st, for £300 six per cent. debentures; charged on all the property, except the uncalled capital.

SANDRINGHAM PRESS, LTD., LONDON, E.C.—Debenture registered April 6th, for £500; holder, H. E. Beesley, 51, Oxford-road, Canonbury, N.; charged on the undertaking and all the property, including the uncalled capital.

MR. CYRIL KENNETH ROE and Mr. Roland White Sprague have been admitted liverymen of the Stationers' Company.

Digitized by Google

Bear in Mind

That money may be wasted in advertising as easily as in any other way. Success depends upon the selection of proper mediums. The best is a well established and influential paper.

A PROPER MEDIUM IS

The World's Paper Trade Review,

which was established in 1879, and is the oldest weekly paper trade journal published in the United Kingdom.

WHAT THEY SAY ABOUT IT.

TESTIMONY OF ADVERTISERS:—

"It may interest you to know that our advertisement in your paper is bringing us a lot of orders for samples."—H. C. STANDAGE & Co., Birmingham.

"We have secured already several orders through the medium of your valued paper."—WOLF & Co., Water Lane, London.

"A journal in which we have great confidence . . . well aware of its circulation and ability."—The Grove Chemical Co., Limited.

"A widely circulating trade journal."—HARRY B. WOOD, Manchester.

APPRECIATION OF READERS:—

"We have for many years been, and still are, subscribers to your journal, which we are always reading with a great deal of interest, and which we consider to be one of the best journals of its kind in Europe.—BAMBLE AKTIE CELLULOSE FABRIK, Herre pr. Porsgrund, Norway.

"I take this opportunity to speak out that your journal has no equal of its kind in all countries."—M. BEHREND, Prince Bismarck's Paper Mills, Varzin, Germany.

"I appreciate the value of your journal, and find it of considerable benefit in my business."—H. A. Craigie, of S. D. Warren and Co., Cumberland Paper Mill, Me., U.S.A.

". . . widely circulated, both in this country and abroad."—Munns and Longden, Solicitors to the British Wood Pulp Association.

"We take great interest in the *Review*, reading it carefully every issue, and you may be sure that its excellence is appreciated in this direction."—Perkins, Goodwin and Co., Paper Stock Merchants, New York.

"The best paper trade journal in the world."—W. H. WILES, Milton Paper Mills, Bowling.

OPINIONS OF CONTEMPORARIES:—

"A widely informed and well managed enterprise, of great value to exporters for its exact Market Reports and statistics of raw material."—*Central-Blatt fur die Deutsche Papier-Fabrikation*, Dresden.

"The leading European exponent of the paper trade."—*American Paper Trade and Wood Pulp News.*

"This weekly journal, published at London, is the most important of those which deal with the paper industry."—(Translation from) *La Papeterie*, Paris, the official organ of the French Wholesale Stationers' Association.

"It is the leading journal identified with the paper industry in England. . . . . Well and intelligently conducted."—*The Paper Trade*, Chicago.

"The completeness of its Market Reports has made it indispensable to the Paper and Paper Stock Trades, and its dependability is recognised throughout Europe and America."—*The Printers' Register* London.

Is your firm's Advertisement now appearing in this well-known trade Journal?

If Not, Why Not?

Please Note. **The World's Paper Trade Review** is subscribed for not only by Paper Makers, and the Home, Foreign, and American Paper Stock and Mill furnishing Trades, but by the Managers and Workmen in Paper Mills, for whom a cheap edition is published; and the advertisement tariff includes insertion in both editions.

The *Review* is undoubtedly the best medium for all classes of advertisements relating to the paper, paper stock, engineering, and allied trades. Rates on application to the publishers, W. JOHN STONHILL & Co., 58, Shoe Lane, London, E.C.

Subscription £1 per Annum (post free) to all countries.

Digitized by Google

The Papyrus Tree.

As the forerunner of paper as we now know it, the papyrus holds an historical place in the history of writing materials. Most people look upon it as a thing of the distant past that served its purpose and then died out, as many other useful materials have done, and so it is quite interesting to learn from the *Pall Mall Gazette* that Italy, at the present time, possesses a small forest of papyrus trees, which grow on the banks of the river Anapus, near Syracuse. The curious thing about the papyrus is that it can only live by the waters of the Nile, the Ciane, and this insignificant river at Syracuse. It seems that attention has lately been drawn to the fact that it is dying out, and no one wants to shoulder the responsibility. Under the Bourbon Government there was a special statute which provided for the taking care of the Sicilian papyrus, but now the administration of Crown lands says it has nothing to do with rivers, and the papyrus is not its business. The Minister of Public Works says the Anapus is neither a river nor a torrent, and in any case the papyrus interests only archæologists, and not the people at large; the Minister of Agriculture declares it to be a botanic rarity which does not come within the bounds of industrial agriculture: and, finally, the Minister of Public Instruction chimes in that he has many needs for his funds, and that the papyrus must find other supporters. There the question now stands, and meanwhile the papyrus is slowly perishing. It is proposed that some academy, botanical by choice, should come to the rescue and administer funds collected from the public for the purpose of cultivating the rare tree and studying the interesting question of why it only grows in certain parts of Italy and Egypt—a question asked even so long ago as Pliny.

The Mosely Education Report.

Press copies of the Report of the Mosely Education Commission to the United States have been sent out, and in a joint summary of conclusions the commissioners say that they are much impressed by the importance placed upon the value of education by the American people, and its benefit at large to the country, in its agriculture, manufactures, commerce, and other matters. The Commission sums up as follows:—We will be called upon in competing in future with American commerce to face trained men, gifted with both enterprise and knowledge. There is absolute need for immediate preparation here to meet such competition. The absence in the United States of class prejudices and of any religious difficulty serves most materially to facilitate the efficient work of their schools. The closest connection is being established in America between theory and practice. The important part which manual training is beginning to assume in American schools also impressed the magnet that attracts every government, every municipality, and every company that finds difficulty in borrowing at home. The Paris Bourse was certain to suffer more than any other international stock exchange when the war broke out. Russian stock suffered less than other international securities. The greatest caution was necessary in all the transactions, but it did not follow that all business must be at a standstill. On the contrary, it was pretty certain that the war would be localised, and that, thanks to the excellent relations existing between Great Britain and France, these two nations would induce their respective allies to listen to their peaceful advice as soon as such could be given with some chance of success. Now the situation looked more hopeful. If Great Britain was to continue to be what she had been in the past, the leading commercial nation of the world, she must hold to her present commercial policy and sound banking principles.

New "Limiteds."

PICTORIAL NEWSPAPER CO., Ltd.

Registered with a capital of £50,000, in £1 shares, to take over the copyright of the *Daily Mirror*, and to carry on the business of proprietors and publishers of newspapers, periodicals, magazines, journals, books, and other literary works and undertakings, printers, stationers, lithographers, typefounders, electrotypers, photographic printers, engravers, die sinkers, bookbinders, designers, draughtsmen, paper and ink manufacturers, booksellers, advertising agents, etc. The signatories are:—E. A. Cope, J. Cowley, F. J. Dottridge, E. Adams, G. D. Belcher, H. F. Woodington, and J. R. Sumpter. No initial public issue. The number of directors is to be not less than two nor more than five; the signatories are to appoint the first. Remuneration as fixed by the company. Holders of shares Nos. 8 to 30,000 may remove directors and fill up vacancies.

HILLMAN, Ltd.

Registered with a capital of £3,000, in £1 shares, to adopt an agreement with J. E. Hillman, and to take over the business of a printer, lithographer, and wholesale stationer carried on by him at 7, Red Lion-yard, Warner-street, Clerkenwell, E.C., and 254A, High Holborn, W.C. No initial public issue. Table A mainly applies. Qualification, £5.

Digitized by Google

THE PAPERMAKERS' OPPORTUNITY!

Much has been said and written concerning the stationary condition of the Exports of British Paper. There are houses ready to do a larger export trade, and to secure increased orders no opportunity should be lost by Papermakers and Wholesale Stationers in bringing their names and specialties before

COLONIAL & FOREIGN BUYERS.

To do this effectively, no better medium presents itself than the "British and Colonial Printer and Stationer," Established in 1878. Its contents are keenly studied by Foreign and Colonial purchasers of Paper, Stationery, &c., and firms advertising in its pages may rely upon securing

GOOD BUSINESS.

From Sydney, N.S.W., Wm. Brooks, Printer and Stationer, writes:—"I read your paper with a great deal of interest, and there is no doubt that it is a paper which should be taken by every printer who wishes to keep himself in touch with developments in our line.

H. S. Cropper and Co., Nottingham, says:—"As a medium for advertising it is second to none."

THE LEADING JOURNAL.

Published EVERY THURSDAY.

Paper-makers, Wholesale Stationers, &c.

DESIROUS OF INCREASING THEIR HOME TRADE,
AND EXTENDING THEIR BUSINESS WITH . .

AUSTRALIA, NEW ZEALAND, INDIA, AFRICA, CANADA, &c.

SHOULD BOOK SPACE WITHOUT DELAY.

NEXT EXPORT ISSUE—including "BUYERS' GUIDE"—IN JUNE.

ADVERTISEMENT RATES on Application to

W. JOHN STONHILL & Co., 58, SHOE LANE, LONDON, E.C.

SUBSCRIPTION:

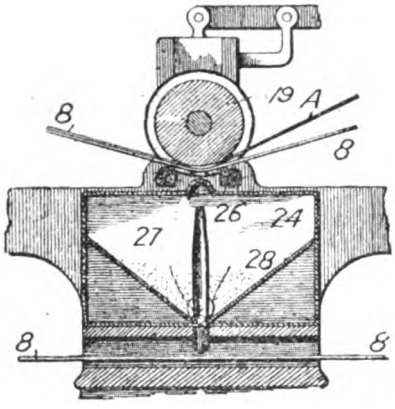
United Kingdom, 10s.; Colonial and Foreign, 12s. per Annum Post Free.

Digitized by Google

Abridged Patent Specifications.

Perforating Paper.

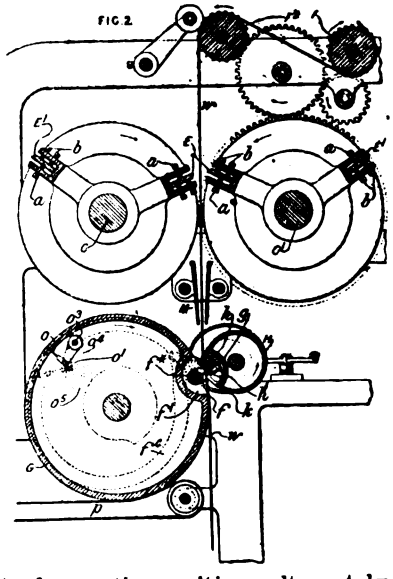
Mr. C. K. Pittmann has patented a sand-blast apparatus for perforating sheets or webs of paper, etc., for use in automatic musical instruments, etc. The web A to be perforated is pressed by the pattern web 8 against a roller 19, beneath which is a sand box 24 from which the sand blast is projected through a suitable nozzle 26 connected with a blower, etc., a revolving screw 28 in the sand box serving to feed the sand towards an aperture 27 in the lower part of the nozzle 26.



The sand is removed from the pattern web by brushes. The pattern web 8 is passed over adjustable stretching rollers, the web A is drawn from a reel provided with an adjustable brake, and both of the webs are passed together between a pair of feed rollers, by which they are drawn slowly through the apparatus. The axles of all the rollers are supported at one end only, to facilitate the application and removal of the webs, etc.

Cutting and Folding Paper.

An invention patented by C. B. Cottrell and Sons Co., relates to means for cutting sheets of different lengths from a web, folding the longer sheets and associating them with the shorter ones. Fig. 2 shows, in sectional elevation, apparatus in which the web *w* passes round positively-driven feed rollers F, F*, between cutting cylinders C, C¹ and through a fixed guide M to the folding cylinders G, H. The cylinders C, C¹ are provided with two pairs of co-operating cutters E, E and E¹, E¹, fixed and adjusted by screws *a*, *b*, and spaced on the cylinders so that of the two sheets cut at each revolution one is twice the length of the other. The folding cylinder G is three times the diameter of the cylinder H, and carries a folding blade *f* co-operating with gripper jaws *g*, *h*¹, *h* on the cylinder H to fold the longer sheets. The blade *f* and grippers *g*, *h*, *h*¹ are substantially the same as those described in Specification No. 3,921, A.D. 1901. The blade *f* is secured in the eccentric or cranked portion *f** of a rock shaft journalled in cheek pieces *f*¹ at the ends of the recess in the cylinder. The shaft is rocked by an arm thereon engaging a stationary cam *f*⁴. The grippers consist of the bar *g* forming part of a cranked rock shaft journalled in cheek pieces *k*, and fingers *h*¹ on a shaft *h* journalled on the bar *g*. The fingers *h*¹ are held by a spring in nearly closed position, so that the blade *f* may tuck the fold between them and the bar *g*. The bar *g* is rocked to move the grippers into the radial or folding position, shown in Fig. 2, and into the tangential position to associate the folded sheet with the half-sheet and release it for delivery. The movement is effected by two cams, one at each end of the cylinder H, which are moved into and



out of operative positions alternately by another cam. These cams engage arms on the ends of the rock shaft or bar *g*. In its first revolution the cylinder H carries the folded sheet round it, and as this revolution is completed the grippers are turned into a tangential position, in which position they are held during the second revolution of the cylinder H, and are turned back to the radial position during the third revolution to repeat the operation. At the end of the first revolution of the cylinder H, the grippers *h*¹ are opened, by a cam, to release the folded sheet, and this and the single sheet are impaled by radial pins *o*, by which they are carried round and delivered to tapes *p* for further folding or otherwise. The pins *o*, when projected, enter holes in the gripper bar *g*. They are fixed on a rod *o*¹ carried by arms of a shaft *o*³ operated by the arm *o*⁴ and a cam. Suitable gearing for driving the cylinders and various parts of the apparatus is described.

Digitized by Google

W. JOHN STONHILL & Co.,
58, SHOE LANE, LONDON, E.C.
"Over 250 enquiries within a day or two of the advertisement appearing."—SAQUI AND LAWRENCE, London.
AT HOME AND ABROAD . . . THE

The World's Paper Trade Review

A WEEKLY JOURNAL FOR PAPER MAKERS & ENGINEERS.

[REGISTERED AT THE GENERAL POST OFFICE AS A NEWSPAER FOR TRANSMISSION IN THE UNITED KINGDOM.]

TWENTY-FIFTH YEAR.

VOLUME XLII. NUMBER 18. LONDON: APRIL 29, 1904. PRICE SIXPENCE. EVERY FRIDAY.

Andrews & Co., Ltd.,

91, QUEEN VICTORIA STREET, LONDON,

And at MANCHESTER.

Telegrams:—"ARBORARIUS," London. Telephone:—835, Bank.

WOOD PULP AGENTS.

MAGO Finest Grade Moist Mechanicals, Hot and Cold Ground.

TOFTE Easy Bleaching Sulphite. (Except in Scotland).

TILSIT Extra Strong German Mitscherlich Sulphite

BÖHNSDALEN Sulphites, Strong News and Easy-Bleaching.

HAFSLUND SULFITFABRIK, Easy-Bleaching Sulphite.

WERMBOHLS FABRIKS AKTIEBOLAG, Easy-Bleaching and Strong Soda Pulps. (Except in Scotland).

GLOMMENS TRAESLIBERI, Hot-Ground and Extra Strong Moist Mechanical Pulp.

SIDEROSTHEN Anti-Corrosive Paint.

Digitized by Google

A. WERTHEIM & Co.,

HAMBURG,

SUPPLY ALL KINDS OF

Sulphite,

Soda and

Mechanical

WOOD PULPS.

OFFICES AT:

CHRISTIANIA Norway	Kirkegaden No. 2[illegible]
GOTHENBURG Sweden	Lilla Kyrkogatan No. 2
MANCHESTER	Guardian Buildings (opposite Exchange).
LONDON	77a, Queen Victoria Street, E.C.
PARIS	Rue de Londres No. 29.
LYONS	34, Cours Gambetta.
MILAN	24, Via Solferino.
TOLOSA (Spain	18, Calle San Francisco.
ST. PETERSBURG	Kleine Podiatscheskaja, No. 4, Qu. 16.
NEW YORK	[illegible], Nassau Street.

Telegraphic Address:

"WERTHEIMO, HAMBURG

Digitized by Google

The World's Paper Trade Review
A WEEKLY JOURNAL FOR PAPER MAKERS & ENGINEERS.

[REGISTERED AT THE GENERAL POST OFFICE AS A NEWSPAPER FOR TRANSMISSION IN THE UNITED KINGDOM.]

TWENTY-FIFTH YEAR.

VOLUME XLII.
NUMBER 18.

LONDON: APRIL 29, 1904.

PRICE SIXPENCE, EVERY FRIDAY.

MATTERS of INTEREST

A Survey of Trade Subjects Engaging Attention at Home and Abroad.

INFORMATION OF TECHNICAL AND PRACTICAL VALUE.

Conducted by

Dr. HENRY P. STEVENS, M.A., Ph.D., F.I.C.

LOSS OF FIBRE.

IN a communication to the *Papier Zeitung* Herr Winkler discusses some remarkable cases where a considerable proportion of fibre is lost in the mill in spite of efficient filters for the waste liquor leaving the sieves. In one case where 45 per cent. of wood pulp had been added to rags, only something between 10 to 20 per cent. of it was found in the finished paper. The estimation was carried out microscopically with the help of carefully-prepared comparison papers containing different proportions of wood fibre. In another case, some 60 per cent. of wood fibre was used in conjunction with hemp and linen. Only some 10 per cent. could be found in the finished paper. If a loss of fibre approaching in magnitude to the examples cited is at all a common occurrence, we are evidently dealing with a question of enormous economical importance to papermakers. Is it possible that they can sustain such losses without being aware of it? Herr Winkler is at no loss for an explanation. All fibres when ground for a long time or too sharply on each other in the roller machinery are more or less reduced to a jelly-like mass of tiny particles of cell wall, which are carried away in the waste liquors. This is especially the case with the delicate wood fibres when used in conjunction with hard tough fibres like linen and hemp. A large proportion are reduced to almost jelly-like consistency and thus lost.

MOISTURE IN PULP.

TROUBLE is of frequent occurrence owing to a difference of opinion as to the methods of determining the proportion of moisture in pulp. Errors in the determination of the moisture are mainly to be accounted for on two heads. Either insufficient time has been given to thoroughly complete the drying, with the result that the pulp is weighed while still holding some moisture instead of being bone dry. Other differences arise in the sampling of the pulp. This, indeed, is no easy matter and is responsible for the greater number of incorrect estimations. It is, of course, impossible to take samples from every bale, nor indeed is this necessary, but those that are sampled must be sampled systematically and portions removed from all parts from the outside down to the centre. Irregularities are most likely to occur owing to the outside portions of the bale being dryer or moister than those on the inside. In the *Chemiker Zeitung* a case was recently described where pulp was brought

Digitized by Google

as containing 70 per cent. air-dry fibre, whereas a careful systematic sampling gave only 51·5 of the bone-dry or 58·6 air-dry fibre. On examination of the bales, it was found that from some small portions weighing about 40 grammes had previously been removed from the centre, obviously for sampling purposes, and as the inner sheets were much dryer too high a content of air-dry fibre had been found.

SAMPLING FILLERS.

THE need for a correct estimation of moisture is an essential for other raw materials besides pulp. Fillers such as china clay, agalite and others always contain a certain proportion of moisture and should be bought and sold on the basis of a moisture free substance. The methods of sampling the mineral and estimating the moisture will follow closely on the lines of those employed in the case of wood pulp. For the sampling portions must be removed from different parts of the sack or barrel. This is conveniently accomplished by means of a long metal tube, preferably slightly conical, pushed well into the sack, and removed full of the material. In this way we obtain samples from all portions, from the outside to the inside of the sack for it is here just as in the case of the wood pulp that variations in moisture content are most likely to occur. China clay will vary enormously in moisture content and may approach 30 per cent. Being a natural clay it is always found moist. It should be dried, spread out in a thin layer in an oven kept at a temperature of 110 to 120 degs. (C.). Under these conditions only moisture is driven off, no fear need be entertained of loss at this temperature of any portion of the two molecules of chemically combined water. Other filling materials such as agalite, prepared by grinding down a rock as talc or soapstone, are naturally much dryer and appear on the market with a much lower moisture content than is usually found with china clay.

PAPER IMPERVIOUS TO MOISTURE.

FOR certain purposes, such as for covering cartridges and for electrical insulation, a paper is required which shall remain as dry as possible when in a moist atmosphere, and the question arises as to what papers serve this purpose best? In the *Papier Zeitung* Herr Winkler takes up this question and publishes a series of measurements made with different papers. They were placed in a very moist atmosphere, 90 per cent. humidity, at 20 degs. (C.) for 96 hours and the increase in weights noted in each case. The sizing of the papers had no appreciable influence on the result. The composition of the papers and the extent to which they were beaten had some influence, although that is all that can be said from an inspection of the table. The results would have been far more valuable had a larger number of papers been tested. Other experiments were made in which the papers were floated on the surface of water for three minutes and then quickly pressed between sheets of blotting paper to remove excess of moisture before re-weighing. In these experiments the results were influenced by the extent to which the papers had been sized. Artificial parchment papers and those prepared with sulphuric acid absorb more moisture than any others, almost half as much again, or more.

*** *Under the heading of* "MATTERS OF INTEREST," *attention will be given to technical and practical questions submitted by students attending paper-making classes and subscribers generally. Correspondents must give their names and addresses, not necessarily for publication, but as a guarantee of good faith.*

Opacity of Paper.

A methodical testing apparatus has been devised by Dr. Klemm, of Leipzig, and made by the well-known firm of Louis Schopper, for determining the opacity of paper.

Dr. Klemm says: In this problem the question to be answered is, of what thickness or weight per square metre must a paper be to enable it to prevent light of a given intensity from passing through it? If this question can be answered accurately, then the opacity can be determined with certainty. Expressed in terms of the thickness, the value will be millimetres; if in terms of the weight, the value will be in grammes per square metre.

As the weight per square metre is more commonly used in the paper trade, this method of determination is adopted preferably so as to obtain at a glance the value of a paper from its transparency. A very transparent paper will require to be very heavy per unit of superficial area to produce complete opacity, whereas a more opaque paper need not be so heavy. To determine this value, the limit of transparency or opacity must be found experimentally by some constant source of light. This is attained by an apparatus which consists of an illuminating tube and an observation tube. Between the two tubes is mounted the arrangement for holding the sheets to be tested, the number of which is increased until they completely intercept the light. This number, multiplied by the weight per square metre, gives the relative opacity. The luminous field is furnished by a Hefner-Alteneck amyl acetate lamp of one candle-power mounted at a distance of ten centimetres from the end of the ground glass disc which forms the inner cover plate.

The distance of the observation tube (the normal length of which is 25 centimetres) is regulated to suit the observer's vision by means of a rack and pinion. The cover plate of the inner end of this tube consists of a square frame provided with hooks to hold the sheets as they are placed in the frame. As each fresh sheet is inserted, the observation tube is screwed back till it touches the glass plate of the illuminating tube so as to hold the sheets in a vertical position. Stray

Digitized by Google

light is avoided by an envelope covering the illuminating tube. The sheets, which are taken from strips which have been previously tested for strength, are inserted in the apparatus until they render the frame invisible.

Supposing the number of sheets required to render the light invisible to be 20, the following results can be calculated: 1. The paper will be 1·20 as thick and 1·20 as heavy per square metre as it would have to be in order to be completely opaque. This 1·20 may be taken as the absolute value of transparency. 2. If the weight per square metre is 80 grammes, then the paper would have to weigh 80 by 20, or 1,600 grammes per square metre, which represents the relative value of transparency.

Out of 90 tests made by Dr. Klemm, he found by examining the most varied sorts of paper that the absolute values of transparency fluctuate between 1·3 and 1·66, and the relative values between 312 and 2,130 grammes. These variations are extremely interesting, and will be made the subject of future communication by the inventor.

Acidylised Cellulose.

Dr. Leonhard Lederer, of Sulzbach, Germany, has been granted an English patent relating to the manufacture of threads, ribbons, plates, tubes, etc., from acidylised cellulose.

A solution of the cellulose compound in acetic acid, phenol or other suitable solvent, is discharged from a receptacle (having an outlet corresponding to the shape of the article to be produced) into a liquid such as alcohol, benzine, etc., which is mixed with the solvent of the acidylised cellulose, but does not dissolve the latter, and the product thus obtained is collected or received by suitable devices.

For instance, a syrupy solution of cellulose acetate in acetic acid in the shape of a thin jet or stream is caused to flow into alcohol, whereupon the liquid mass becomes plastic. After a short time the thread obtained in this manner is removed from the alcohol, drawn out or stretched and dried at a moderate heat.

In a similar manner solutions of acidylised cellulose in phenol, chloroform, or in mixtures of several solvents, may be converted into threads or otherwise shaped products, and if desired for special purposes, dye liquids, gelatine, oil of turpentine, camphor, or solid colouring matters, metal dust or other suitable materials may be added to the solution of acidyl-cellulose used as a raw material.

It is claimed that the shaped acidyl-compounds of cellulose possess considerable tensile strength, brilliancy, and are impermeable to water.

To Our Readers.—When writing to advertisers please mention the *World's Paper Trade Review* as the source of information.

Exports of British Paper.

The following returns show the exports of British paper during the week ended Saturday last:—

From London.

Printings. — To Australia, 165 cwts.; Africa, 203 cwts.; Argentine, 8 cwts.; Belgium, 183 cwts.; B. W. Indies, 24 cwts.; Cape, 14 cwts.; China, 253 cwts.; Channel Islands, 18 cwts.; Egypt, 99 cwts.; France, 372 cwts.; Greece, 5 cwts.; Germany, 6 cwts.; Holland, 70 cwts.; India, 595 cwts.; Mauritius, 14 cwts.; Madagascar, 19 cwts.; New Zealand, 604 cwts.; Portugal, 118 cwts.; S. America, 15 cwts.; W. Indies, 3 cwts.

Writings. — To Australia, 172 cwts.; Africa, 387 cwts.; Cape, 4 cwts.; China, 106 cwts.; France, 97 cwts.; Gibraltar, 62 cwts.; Italy, 5 cwts.; India, 311 cwts.; Mauritius, 16 cwts.; New Zealand, 231 cwts.; Portugal, 149 cwts.; St. Helena, 51 cwts.; S. Settlements, 18 cwts.; W. Indies, 61 cwts.

Other Kinds.—To Australia, 132 cwts.; Africa, 297 cwts.; Belgium, 28 cwts.; Brazil, 18 cwts.; Cape, 186 cwts.; China, 76 cwts.; France, 48 cwts.; Germany, 16 cwts.; Holland, 12 cwts.; India, 55 cwts.; Japan, 8 cwts.; New Zealand, 549 cwts.; Portugal, 76 cwts.; Sweden, 9 cwts.; United States, 108 cwts.; W. Indies, 13 cwts.

From Glasgow.

Printings. — To Australia, 14 cwts.; China, 49 cwts.; India, 188 cwts.; Norway, 1 cwt.; Spain, 17 cwts.

Writings.—To Australia, 1,951 cwts.; China, 24 cwts.; India, 155 cwts.; United States, 92 cwts.

Other Kinds.—To Australia, 20 cwts.; Cape, 23 cwts.; India, 44 cwts.; Italy, 65 cwts.; United States, 221 cwts.

Foreign Strawboards, &c.

The imports of straw, mill, and wood pulp boards, etc., at British ports during the week ended Saturday last were:—

Strawboards.—From Belgium, 440 bales; Holland, 16,944 bales, 34 rolls.

Wood Pulp Boards.—From Belgium, 31 bales; Germany, 1,080 bales; Holland, 420 bales; Norway, 271 bales; Sweden, 3,024 bales; United States, 641 bales, 70 rolls.

Millboards.—From Holland, 16,750 bales, 81 rolls.

Pasteboards.—From Belgium, 8 cases; Finland, 28 bales; Germany, 222 rolls; Holland, 4,137 bales, 1 case; Sweden, 55 bales.

Cardboards.—From Germany, 12 cases.

New Pegamoid, Ltd.—The directors have resolved to pay on May 31st an interim dividend, at the rate of 8 per cent. per annum, free of income tax, to the shareholders on the register on March 31st.

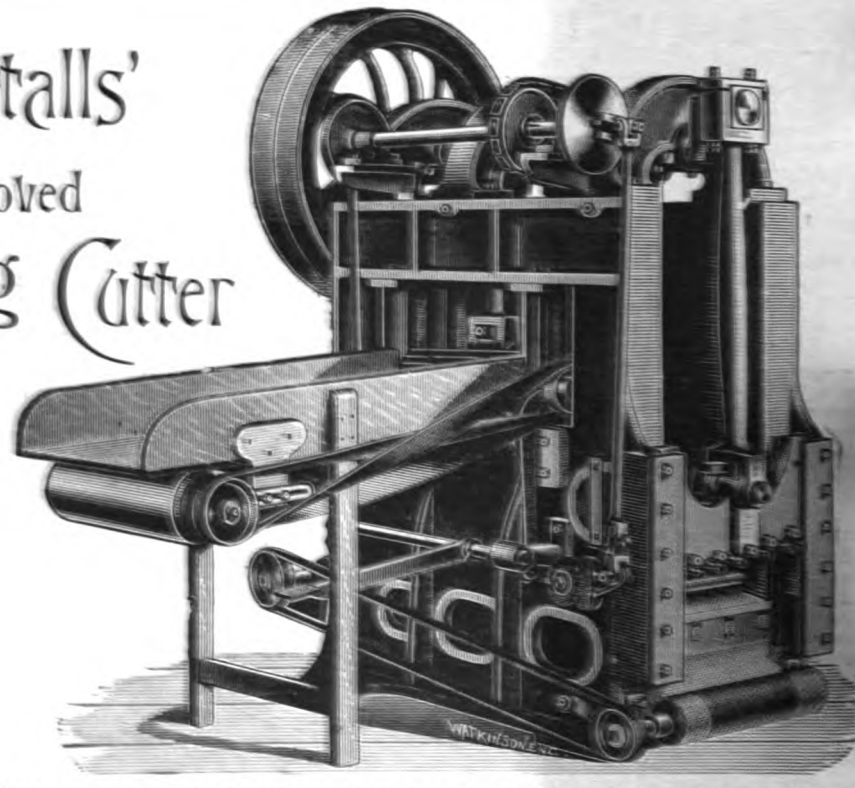
Digitized by Google

BENTLE

Papermak

BURY, n

Nuttalls' Improved Rag Cutter



This Machine has now been Greatly Strengthened and Simplified, and its Output Increased. It is Equally Effective upon the Strongest and Lightest Materials, and Every Class of Stock.

Sole British Makers of

NO WELL EQUIPPED

FULL PARTICU

Digitized by Google

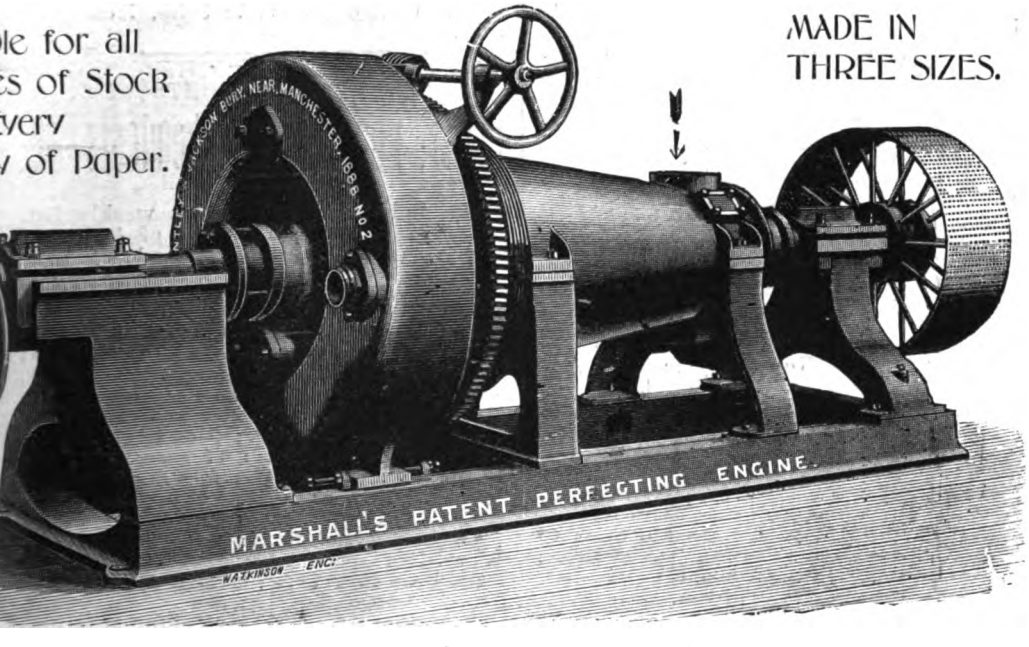
JACKSON
LIMITED.

ngineers,
ANCHESTER.

Marshall's PATENT Perfecting Engine

ble for all
es of Stock
very
y of Paper.

MADE IN
THREE SIZES.



his Engine will produce a Better Finished, Stronger. and More Even Sheet of Paper from e same Materials than can be produced by any other Mechanical Process, and at the same time will REDUCE the TIME and POWER Required for Beating.

OBURN-TAYLOR Machine.

SHOULD BE WITHOUT.

APPLICATION.

Digitized by Google

British Imports of Foreign Paper.

The London Customs Bills of Entries show the following arrivals from the countries mentioned during the week ended Saturday last: -

Unprinted.

AUSTRO-HUNGARY. — 70 bales, 41 rolls, Beck and Pollitzer.

BELGIUM. - 8 bales, Lavender Whf. Co.; 22 bales, R. Ulrich; 38 bales, Barber and Co.; 45 bales, G. S. N. Co.; 50 cases, Siemens Bros.; 122 bales, Leach and Co.; 6 bales, 878 rolls, Hernu, Peron and Co.; 7 bales, Thomas and Son; 74 bales, 22 cases, J. Harrison; 20 cases, J. Cockrill Line Co.; 23 bales, 16 rolls, Sheldon and Co.

DENMARK. — 242 bales, R. Ulrich; 115 bales, Trinity Wf. Co.; 20 rolls, Tegner, Price and Co.

CHINA.—5 cases, Smith and Sons.

FRANCE.—3 cases, J. Harrison; 1 case, Mory and Co.; 6 cases, Paul and Co.; 4 cases, Johnson and Sons; 12 bales, Hernu, Peron and Co.; 6 cases, Atkins and Nesbit.

GERMANY.—152 bales, 182 rolls, Dowgate Dk.; 384 bales, 12 cases, 50 rolls, R. Ulrich; 122 bales, Lovell and Sons; 881 bales, 3 cases, W. C. Batchelor; 82 bales, Hernu, Peron and Co.; 7 bales, M. D. Co.; 5 bales, 20 rolls, T. H. Lee; 104 bales, Foley and Co.; 191 rolls, J. Spurling; 13 rolls, Taylor Bros.; 76 bales, 330 rolls, Beck and Pollitzer; 112 rolls, Blackwell and Co.; 5 bales, Irongate Wf.; 29 bales, Henle and Co.; 17 bales, Barber and Co.

HOLLAND.—467 bales, 4 cases, 14 rolls, Beck and Pollitzer; 44 bales, W. C. Batchelor; 655 bales, Hernu, Peron and Co.; 7 bales, M. D. Co.; 553 bales, 42 cases, 50 rolls, Netherlands, S. B. Co.; 35 bales, 63 cases, 180 rolls, Barber and Co.; 35 bales, Dowgate Dk.; 81 bales, 28 rolls, Taylor Bros.; 33 cases, Beer and Co.; 257 bales, Little and Johnston; 30 bales, Robinson, Roberts and Co.; 23 bales, J. Spurling; 54 bales, 5 cases, Van Dam and Co.; 5 bales, Johnson and Sons.

JAPAN. 19 cases, Warner and Co.; 7 cases, L. and I. D. Co.; 4 cases, Berrick Bros.

NORWAY. 46 bales, Guppy and Son; 40 bales, Foley and Co.; 24 bales, Taylor Bros.; 178 bales, 60 rolls, Trinity Wf. Co.; 32 bales, Hernu, Peron and Co.; 11 bales, 41 rolls, R. Ulrich; 16 bales, 30 rolls, W. Batchelor; 24 bales, Johnson and Sons; 10 bales, Tegner, Price and Co.; 7 bales, Sabel and Co.; 20 bales, Lovell and Sons.

SWEDEN. 19 bales, 311 rolls, Dowgate Dk. [illegible] bales, 30 rolls, M. D. Co.; 38 bales, 4 cases, 905 rolls, Trinity Wf. Co.; 120 bales, 800 rolls, Taylor Bros.; [illegible] Foley and Co.; 27 bales, Crabb [illegible] 57 bales, Hernu, Peron and Co.; [illegible] bales, 90 rolls, J. Spurling; 15 [illegible] and Pollitzer; [illegible] [illegible] and Co.; 4 bales, 80 rolls, [illegible] and Bronkhorst; 40 bales, 7 cases, [illegible] W. C. Batchelor; 70 bales, Speer and Sons; 21 bales, L. and I. D. Co.

UNITED STATES. — 37 cases, W. Dixon; 48 cases, Peabody and Co.; 509 rolls, Mercantile Light Co.; 91 cases, 408 rolls, Beck and Pollitzer; 50 cases, Sheldon and Co.; 150 cases, B. Galloway.

Printed or Coated.

BELGIUM.—214 bales, 8 cases, J. Cockrill Line.

GERMANY.—79 bales, 3 cases, Argo S. S. Co.; 64 bales, L. and I. D. Co.; 6 cases, R. Ulrich.

HOLLAND.—143 bales, Netherlands S. B. Co.

UNITED STATES.—15 bales, American Express Co.; 5 bales, Mount and Co.; 11 cases, Beck and Pollitzer; 48 cases, Rottman and Co.

Unclassified.

The paper imports (unclassified) at th principal provincial ports during the wee ended Saturday last were :—

From Belgium, 1,308 bales, 6 cases; France, 495 bales, 57 cases 60 rolls; Finland, 73 bales; Germany, 1,030 bales, 8 cases, 12 rolls; Holland, 922 bales, 54 rolls; Norway, 2,645 bales, 2,792 rolls; Sweden, 2,886 bales, 50 cases, 1,911 rolls; United States, 78 bales, 1 case, 447 rolls.

AMERICAN IMPORTS OF

Paper, Paper Stock, Chemicals, &c.

The following is the latest weekly list, compiled from official returns, of American imports from the ports mentioned :—

Paper.

ANTWERP.—New York: 10 cases, W. Seyd; 20 cases, Dingelstedt and Co.; 43 cases, Hensel Bruckmann and Lorbacher; 6 cases, Kupfer Bros.; 3 cases, L. C. Wagner; 60 cases, American Express Co.; 5 cases, W. Huermann; 3 cases, Kimer and Amend; 1 case, Dejonge and Co.; 9 cases, Downing and Co.; Philadelphia: 27 cases, C. Beck Paper Co.; 10 cases, Hartung and Co.

BRISTOL.—New York: 8 bales, E. Kimpton.

BREMEN.—New York: 2 cases, Maltus and Ware.

GENOA.—New York: 11 cases, Japan Paper Co.

HAMBURG.—New York: 7 cases, D. Gunsburg; 177 cases, Dingelstedt and Co.; 12 cases, Ault and Wiborg: 75 cases, Lindenmeyr and Son; 4 cases, A. Kraut. Philadelphia: 11 cases, Hempstead and Son; 13 packages, Brown Bros.

LIVERPOOL.—New York: 108 cases, American Tobacco Co.; 80 cases, Downing and Co.; 13 cases, B. and O. Meyers. Boston: 6 cases, American Express Co.; 2 cases, B. D. Wooster.

LONDON.—New York: 80 cases, American Express Co.; 26 cases, Downing and Co.; 8 cases, J. A. Manhart; 4 cases, Favor Ruhl and Co.; 4 cases, S. Wolff; 7 cases, M. Schmidt; 1 case, Einstein Wolff and Co.

Digitized by Google

ROTTERDAM.—New York: 53 cases, Amsinck and Co.; 1 case, Fuchs and Lang Co.; 4 cases, Sheldon and Co.; 10 cases, Dejonge and Co.; 68 cases, Amsinck and Co.; 49 cases, J. W. Hampton; 4 cases, Dejonge and Co.; 17 cases, Dingelstedt and Co.; 21 cases, Schwencke, Kirk and Co.; 2 cases, Knauth, Nachod and Kuhne; 2 cases, W. Seyd; 29 cases, Sheldon and Co.

YOKOHAMA.—New York: 30 cases, American Trading Co.

Manillas.

BREMEN.—New York: 11 bales, F. Salomon and Co.

BARCELONA.—New York: 77 bales, Butterworth and Co.; 143 bales, J. Joseph and Bro.

HAMBURG.—New York: 107 bales, F. Salomon and Co.

Rags.

ANTWERP. — Philadelphia: 319 bales, Brown Bros.; 311 bales, Butterworth and Co.

BARCELONA.—New York: 77 bales, Butterworth and Co.; 143 bales, J. Joseph and Co.

GLASGOW.—New York: 93 bales, J. R. Walker.

HAMBURG.—New York: 292 bales, F. Salomon and Co.; 88 bales, Salomon Bros. and Co.; 150 bales, Richard and Co. Philadelphia: 247 bales, Jessup and Moore; 30 bales, to order; 14 bales, Brown Bros. and Co.

LONDON.—Philadelphia: 103 bales, to order.

MANCHESTER.—Boston: 29 bales, R. B. Bishop Manufacturing Co.; 525 bales, Butterworth and Co.; 44 bales, Downing and Co. Philadelphia: 627 bales, Guaranty Trust Co.

NAPLES.—Boston: 94 bales, Wolf and Son; 50 bales, True and McClelland.

ROTTERDAM. — New York: 250 bales, Butterworth and Co.

Waste Paper.

GLASGOW.—New York: 29 bales, Millar and Co.

LONDON.—Philadelphia: 98 bales, Muller, Schall Co.; 259 bales, to order.

Wood Pulp.

ANTWERP.—New York: 837 bales, 65 tons, R. Helwig.

HAMBURG.—New York: 116 bales, 25 tons, R Helwig; 320 bales, 40 tons, S. Goldman; 471 bales, 88 tons, F. Salomon and Co. Philadelphia: 372 bales, Jessup and Moore Co.: 1,200 bales, to order.

MANCHESTER.—Philadelphia: 272 bales, to order; 120 bales, Brown Bros. and Co.

Bleaching Powder.

BRISTOL.—New York: 102 casks, J. L. and D. S. Riker.

HAMBURG.—New York: 390 drums, Roessler and Hasslacher.

Soda Ash.

LIVERPOOL.—New York: 15 tierces, Wing and Evans. Boston: 33 tierces, 200 bags, Linder and Meyer.

MANCHESTER.—Boston: 40 casks, Linder and Meyer.

China Clay.

LIVERPOOL.—New York: 60 casks, F. A. Reichard; 100 casks, L. A. Salomon. Boston: 766 casks, J. Richardson. Philadelphia: 100 casks, Knight and Co.; 600 casks, Perkins, Goodwin and Co.

MANCHESTER. — Boston: 659 casks, J. Richardson. Philadelphia: 50 bags, Knight and Co.

Sizing.

HAVANA.—Philadelphia: 79 bales, Lawrence, Johnson and Co.

HULL.—New York: 161 bales, Castle, Gottheil and Overton.

LIVERPOOL.—Boston: 226 bags, Griffiths and Co.

Sulphur.

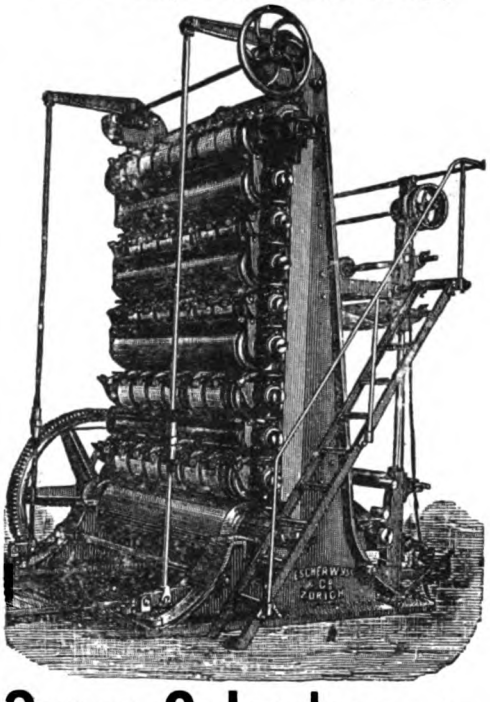
LIVERPOOL.—Boston: 1,001 bags, Linder and Meyer.

LONDON.—Philadelphia: 25 casks, to order.

ESCHER WYSS & CO.,

Engineers,

ZURICH, SWITZERLAND.



Super Calenders and Friction Calenders

OF ANY WIDTH.

Sole Agent for the U. K.—

ALPH. STEIGER, C.E.,

28, VICTORIA STREET, LONDON, S.W.

Digitized by Google

Papermaking in India.

The Re-Starting of the Punalur Mill.

After being idle for a period of twelve years—from 1892 to 1904—the paper mill at Punalur, Travencore, South India, was recently re-started under the management of Mr. Alexander May, engineer. The new proprietors are Messrs. Wallibhoy Kaderbhoy and Co., who acquired the works and 83 acres of adjoining jungle, etc., for the sum of Rs. 32,005, or about £2,135, from the Travencore Government.

The mill was built and started in 1890, under the supervision of Mr. Robert Lucas, a well known and experienced papermaker. It was controlled by a limited company, the management being in the hands of Messrs. Cameron, Chisholm and Co., clay and tile manufacturers, of Quilon. The works were under the superintendence of an assistant manager and a foreman, but, unfortunately, regular working was interfered with owing to break-downs, etc., from various causes, and when it was decided to cease operations the mill was deprived of its main driving power owing to the collapse of the vertical shaft of a 54-h.p. turbine. The mill only worked about 2½ years, and the cause of the shut-down was attributed to a lack of working capital.

The new owners are connected with several flourishing concerns—cocoa-nut oil mills, flour mills, river steam launch service, wood contractors, etc., for the principal railways and the Travencore Government, etc. They took over the property in the early part of 1902, and at the commencement of the present year appointed Mr. Alexander May to inspect and report upon the mill with a view to re-starting. Mr. May, who has had experience in a number of Continental paper mills, recognised that the machinery was originally of a splendid type. The beaters, tanks, and pans, however, had suffered considerable damage by the action of chemicals, etc. Repairs, renewals and alterations were decided upon, and the mill was reopened within a few weeks. It may be mentioned that the machinery in the mill was supplied by Messrs. Bentley and Jackson, Ltd., of Bury, and, notwithstanding the long period of idleness and no overlooking, it has been brought to serviceable use, which speaks well for the excellent workmanship and durability of the plant turned out by the Lancashire firm.

At first the mill will run on browns and cardboards, but later on it is intended to run on "whites." It will be necessary to instal additional machinery, and it is also proposed to increase the driving power.

The country in the vicinity of the mill abounds with a bamboo-like plant called eta, and according to trials made this gives 24 per cent. of fibre after being treated with 10 per cent. of 58 per cent. caustic, and boiling under 25 lbs. square inch pressure for from six to eight hours. The fibre is said to be easily bleached, and gives a fairly strong paper. It is reported that raw materials, including rags, are plentiful.

The Esparto Trade.

An interesting article on the present position of the esparto trade appears in a recent issue of the *Journal General*. The writer says that the area under cultivation of esparto covers in Algeria about seven millions of hectares. It is particularly abundant in the department of Oran, where esparto tracts occupy all the high plateaux to the south of Sebdou, Daya, Saida and Frenda, and have a total superficies of about four millions of hectares. Esparto is grown to some extent in the department of Algiers itself, but only in comparatively small quantities, in the neighbourhood of Teniet-el-Haad, Aumale, the Bibans, Delfa, Bou-Saada, and Laghouat. In the department of Constantine, on the contrary, it is found in abundance to the west and the south of Setif, although not to the same extent as in Oran.

According to the Customs returns, the total exportation of esparto in the year 1902 was 677,533 quintals, representing a value of 5,012,000 francs. The destination of the exports of grass could be roughly stated as follows:—

France ...	21,702 quintals,	value	150,000 fr.
England ..	618,904 ,,	,,	4,580,000 ,,
Belgium...	6,178 ,,	,,	44,000 ,,
Spain ...	30,749 ,,	,,	228,000 ,,

More than half the quantity exported was shipped from Oran, from whence 398,060 quintals were dispatched during the year in question.

The Algerians have for some time past had under consideration the possibility of establishing in the country itself some important industry of a remunerative character, the necessary raw material for which could be obtained on the spot. Many projects of this kind, having for their object the transformation of esparto into pulp, have been set on foot from time to time, but without success. The principal obstacles appear to have been the scarcity of water, and the want of fuel and the necessary chemical products required in the conversion of the grass into pulp.

In order to make a ton of pulp from esparto grass it is necessary to have about a hundred cubic metres of water. Such quantities cannot readily be obtained in some parts of Algeria, and in order to ensure a permanent supply it would be necessary to make some provision in the way of chutes. Then, again, with regard to fuel, Algeria is almost dependent on foreign sources for its supplies of this commodity. It has been stated that in English mills esparto can be treated with fuel at a cost of from 8 to 10 francs (? per 100 kilos.), whereas in Algeria a similar mode of treatment on the spot would probably cost from 25 to 28 francs.

Digitized by Google

Under these circumstances local competition is hardly to be thought of.

So far as the necessary chemicals are concerned, such as soda and chloride of lime for washing and bleaching purposes, English mills procure these at from 20 to 24 francs per 100 kilos., whereas Algerian manufacturers would have to pay about 30 francs for the soda and 25 francs for the chloride. The raw material for the production of these chemicals is found in Algeria, but it has not yet paid to manufacture them, seeing that there is not the least local demand.

Nevertheless, in spite of these adverse circumstances, the writer of the article in question does not altogether despair of a practical solution of the question in the near future. He says that the day when the French papermakers find themselves under the necessity of employing esparto pulp in large quantities, for which they will be able to offer remunerative prices, will also see the development in Algeria of the esparto pulp manufacturing industry that has so long been under consideration; it will at once open up the country, and furnish an industrial material that will put the Algerians in a position to break up the monopoly that has been so long held by English papermakers.

J. M. VOITH,

Papermakers' Engineer & Turbine Builder

HEIDENHEIM - on - BRENZ.

Every Description of Machinery

FOR PAPER AND PULP MILLS.

SPECIALITIES:

Paper Machines.	Basalt Lava Beater Rolls.	Nacke Refining Engines.
Board Machines.	Dr. Wurster's Pulping Engines.	Strainers & Knotters.
Calenders.	Large Four-sided Cutters, with Mechanical Feed.	Hydraulic Presses.
Bischof's Reelers.		Packing Presses.
Angle Cutters.		Stuff Pumps and Water Pumps.
Rag & Rope Engines.		
Beating Engines.		

TURBINES suitable for all Falls and Quantities of Water.
TURBINE GOVERNORS of utmost Precision.
1,502 TURBINES, with 244,882 h.p., in use and on order.

Sole Agents for the United Kingdom and Colonies:—

J. MARX & Co., 133—139, Finsbury Pavement, E.C.

Akt.-Ges. für Maschinenpapierfabrikation Aschaffenburg,

MANUFACTURERS OF

BLEACHED and UNBLEACHED

Sulphite Wood Pulp

— Mitscherlich and Ritter-Kellner Systems —

Of finest quality, excellent strength, length of fibre and colour. Daily production 120—130 tons dry weight.

Mills at { *Aschaffenburg a. Main. Stockstadt a. Main.*
Walsum a. Rhein (formerly Niederrheinische Zellstoff A.-G.).

Sole Agent: HARRY B. WOOD, CATHEDRAL STREET, MANCHESTER.

Digitized by Google

Bergvik Co., Ltd.

Outturn of Wood Pulp Mill to be Increased to Over 18,000 Tons.

Mr. G. C. Curtis (chairman of the company) presided at the fifteenth ordinary general meeting held in London on Friday last. He said last year's trading was more favourable than that of the preceding year. Some profit was made on wood pulp manufacture, but the improved profits were due to the better prices obtained for wood goods. After referring to the Swedish accounts, he said wood pulp prices in this market were improving. For this year they had sold practically all they could make at better prices than were obtainable last year. It was the custom in the trade to make contracts some time ahead, and he might tell them that for 1905 a large proportion of their make had been sold at prices which showed an improvement. At the factory everything was going on satisfactorily, and experience showed them that estimates, as regards cost of production, were well within the mark. As the shareholders were aware, they started manufacturing operations early last year, and for the first few months were only able to produce about 50 per cent. of their normal capacity. In July, however, they had got to their full capacity and they were able, as anticipated, to make over 8,000 tons by December. The profit made was about £7,000 without allowing anything for interest on the money employed. The chairman mentioned the market was a bad one, and prices obtained were very low, and he also pointed out that during the time the mill was turning out only a small quantity the cost of production was comparatively high. The profit represented only about six months' working. When they decided to erect a new pulp factory they realised, as they had no difficulty in getting all the raw material necessary, that within certain limits the bigger the manufacture the less would be the cost of production, and everything was arranged in such a way that an extension could easily be made. At the outset, however, it was thought as well to go slowly, but as soon as they saw that their manufacture was quite successful—and he had been told that it was as good, if not better, than any other strong sulphite fibre made in Sweden, and also that the cost of production was such as to leave a margin of profit even at the low prices that had lately been current—they decided to enlarge. With a further expenditure of about £28,000, which would not necessitate any issue of further capital, they would be able to increase their outturn to 18,000 tons. Considering the relatively small sum, this was a large increase, and no explanation was necessary from him for the shareholders to recognise the substantial reduction that ought to result in the cost of production. The chairman hoped the additions would all be completed by the middle of this summer, and that the manufacture for the present year would be about 15,000 tons. While the pulp factory was building they had a large amount of capital which had been more or less unremunerative, but he hoped the profits that they would make from the wood pulp source would prove of valuable assistance to them. At all events for the next two years, owing to the contracts already made, they could see that this branch of their business would be profitable. This was all the more satisfactory as, owing to the fall in prices this year, their profits from wood would be less than they were last year. The better they succeeded with the wood pulp manufacture, the more they would be able to save their freehold forests. In conclusion, he moved the adoption of the report and accounts, and the resolution being seconded by Mr. F. F. Lidderdale, it was carried unanimously. The chairman then moved: "That the dividend of 6 per cent. for the year ended December 31st, 1903, less income tax, paid on the preferred shares be approved, and that a dividend of 16s. per share, being 8 per cent. for the year ended December 31st, 1903, less income tax, be paid on the deferred shares." Mr. Lidderdale seconded, and the motion was agreed to.

A China Clay Syndicate.

The Futile Efforts on the Part of Americans to Capture British Works.

An attempt was made some months ago on the part of an American syndicate to capture the china and ball clay industries of this country. The negotiations, however, were not successful, but according to the *Cornish Guardian* further efforts may be made to carry out the purchase. A correspondent of the paper mentioned gives some particulars of an interview with a gentleman holding a high and responsible position under the American Government, who acted as agent of the syndicate during the negotiations with the clay merchants.

The syndicate, it is stated, comprised a powerful group of American financiers, with Mr. Pierpont Morgan at the head. The terms offered were half the purchase money in cash, half in shares, and at least 10 per cent. of the profits for thirty years, the present owners to become directors or managers. Whilst there was a disposition to sell, the difficulty was in the matter of arranging terms, one or two of the largest firms being absolutely unreasonable in their demands. The syndicate, however, was prepared to pay a big price, and wanted all the works or none.

According to the representative of the *Cornish Guardian*, the agent proved to be in possession of the most detailed information of every phase of the china and ball-clay industries. He not only knew all there was to be known of the deposits all over the world, but was also aware of the output in

Digitized by Google

England, the quantity exported from Plymouth, the names of merchants, agents, and ultimate buyers, and the amount of profit made by the various parties to the transaction.

At present the syndicate has no prospects of securing a hold on the clay industry by the methods previously pursued, but the agent is not without hopes that a purchase may be made in another way, and by absolutely different tactics. He says that, by judicious management, the present expenses of many of the clay companies could be enormously curtailed, and his remarks seem to show that this would be the loophole through which the next attempt to acquire the clay industry would come.

"Once the syndicate has captured the industry," the agent remarks, "it will apply itself to the question of having its own plantations, timber yards, cooperages, cargo boats, and wagons, so as to minimise the expenses in this direction."

SIMPOLE'S,

Complete Office & Library Furnishers.

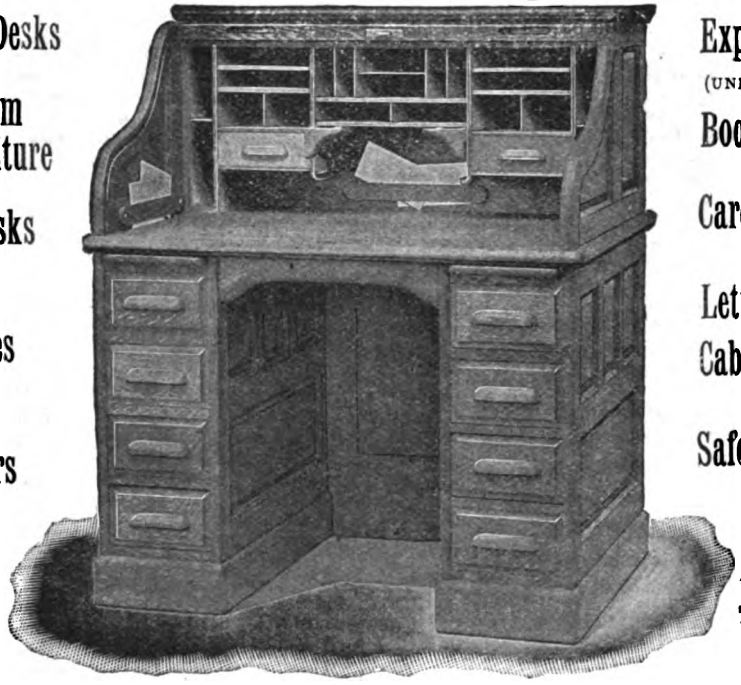
Roll Top Desks

Board Room Furniture

Clerks' Desks

Consulting Tables

Revolving Chairs



Expansion (UNIT SYSTEM) Bookcases

Card Index AND Letter Filing Cabinets.

Safes, &c.

ESTIMATES GIVEN.

INSPECTION INVITED.

Established 1844.

Telephone: No. 1847.

(Late Cathedral Steps), 36, DEANSGATE, MANCHESTER.

TRADE MARK.

LÖVENSKIOLD-FOSSUM,

SKIEN, NORWAY.

EXPORTER OF

Moist Pine Pulp.

Sole Agents for England and Ireland:—
HANS DESSEN & CO.,
2, Great Winchester, Street, LONDON, E.C.

Sole Agents for Scotland:—
W. GRANT & CO.,
4a, St. Andrew Square, EDINBURGH.

Digitized by Google

Commentarium

With the delightful snap of bright and genial Spring weather, typical of the best that England can do in the matter of gentle Springs when she likes, business in most departments is experiencing a little fillip which is very welcome. There is not a great deal of grumbling in the paper world at the present moment, although it is the especial privilege of the British papermaker to snarl in a casual, good humoured sort of way at the state of his order book. But at lunch time round about London Paperdom which may roughly be said to comprise what lies within half a mile radius of Mansion House Station when you see a paper trade man sauntering leisurely along behind a good cigar, with his hands deeply sunk in his trouser pockets, you may know that his profit and loss account is for the moment showing a decent balance on the right side, and there is no more patent factor in producing that desirable condition than a spell of genial weather.

* * *

There is corn in Egypt still, just as there is, I suppose, still some bulk left in Gilead. But Egypt now lacks one thing which is the gain of England. Rome and Beauty. Mr Chamberlain has shaken off the sand of the desert, the sphinx and the pyramids, and returned once more to St Stephens. We have all missed him, friends and foes alike during his weeks of absence, because although there are many Josephs in this world, and many coats of as many colours, there is only one Joseph Chamberlain. Now that he is with us once again we suppose there will be a recrudescence of fiscalitis which has been rather fizzing out of late. This would, almost seem to indicate that the new fiscal idea is rather a hot potato in the hands of politicians and economists at the present moment which, like the monkey, so often when weak glad to drop if they could.

* * *

It has been rumoured that Mr Chamberlain proposes to make certain modifications in the outlines of his redoubtable Tariff Policy, but how far this is founded on fact we do not seem able to say. It seems that the home-coming of the apostle has aroused his colleagues, and it is said that a most comprehensive discussion of the question has been proceeding, that is to say, under the circumstances it was of the coming Budget Session.

* * *

It remains to be seen how closely the Government will follow the path of what they want as between Protection and Free Trade. I do not know that the chemical industries, with which the paper trade is so intimately associated, have quite so definitely pronounced in favour of one side or the other. It is evident, however, that it has become an article of faith with the Protectionists that our chemical industries are ruined. Well, I do not pretend to be an expert in the statistics of the chemical trades, but I see that the German experts are clearly of opinion that our chemical industries are by no means in the condition which the British Protectionist view appears to indicate. It is quite the other way seemingly.

* * *

THE German expert view of the situation is expressed in the course of statements gathered and issued by the German Ammonia Syndicate. Their calculations show that the world's production of sulphate of ammonia during last year was 570,000 tons. Of this total, or less than, 234,000 tons were made in England, Germany, our principal competitor, only produced 140,000, while the United States produced just half that quantity—70,000 tons—and France 52,000 tons, so that we are easily first as regards this product; and, in several other important chemical productions, which concern the interests of papermakers, the United States is just about as well off. So that the ruin of our chemical industries is an assumption to which fair minded controversialists should not attach too much importance at the present moment.

* * *

As commercial interests in this country are concerned in the continued prosperity of the shipping industry—the paper trade more than many. It is satisfactory to find that, all the pessimism induced by fiscal controversy notwithstanding, our trade in "bottoms" not only continues to hold its own, but is continuing its predominance over the shipping industries of all other countries. Our contemporary, the *Shipping World*, has done some good service by preparing a statement in which, after a careful analysis of all available records, the conclusions arrived at that at no time in our maritime history has our shipping supremacy been so indisputable. Which sounds well and makes our manly bosoms swell also.

* * *

As the dismal wonk say it—like this are the figures speak for themselves, and the are these:—

United Kingdom	2,658,432	4,391,151
Germany	390,109	897,707
France	357,415	548,574
U.S.A.	224,510	729,667
Russia	2,982	147,970
Italy	103,855	180,104
Japan	18,917	213,425
Spain	111,532	104,647
	3,284,552	7,073,575

* * *

In dealing with these figures one might almost say that "comment is needless as

Digitized by Google

editors have been known to write when they found themselves in a tight corner. It will be noticed, however, that vast strides have been made by Russia and Japan. The maritime advance of the latter needs little explanation. Events have prepared us for it. That of Russia can be, it seems, almost explained away, by reason of the fact that the figures do not really disclose the actual position. Many British vessels engaged in the Baltic trade fly the Russian flag in consideration of privileges granted by the Russian Government, and this contributes a fictitious importance to the increase in the figures for Russia for 1903-4. It will be seen that the United Kingdom is the only country that gets into seven figures, and even that by an easy win. G. A. F.

THE PAPERMAKERS' OPPORTUNITY!

Much has been said and written concerning the stationary condition of the Exports of British Paper. There are houses ready to do a larger export trade, and to secure increased orders no opportunity should be lost by Papermakers and Wholesale Stationers in bringing their names and specialties before

COLONIAL & FOREIGN BUYERS.

'To do this effectively, no better medium presents itself than the "British and Colonial Printer and Stationer," Established in 1878. Its contents are keenly studied by Foreign and Colonial purchasers of Paper, Stationery, &c., and firms advertising in its pages may rely upon securing GOOD BUSINESS.

THE LEADING JOURNAL.

Published EVERY THURSDAY.

Paper-makers, Wholesale Stationers, &c.

DESIROUS OF INCREASING THEIR HOME TRADE,
AND EXTENDING THEIR BUSINESS WITH . .

AUSTRALIA, NEW ZEALAND, INDIA, AFRICA, CANADA, &c.

SHOULD BOOK SPACE WITHOUT DELAY.

NEXT EXPORT ISSUE—including "BUYERS' GUIDE"—IN JUNE.

ADVERTISEMENT RATES on Application to

W. JOHN STONHILL & Co., 58, SHOE LANE, LONDON, E.C.

SUBSCRIPTION:

United Kingdom, 10s.; Colonial and Foreign, 12s. per Annum Post Free.

Digitized by Google

The Specific Gravity or Density OF PAPER.

Criticism on "C.B.S. Units and Standard Paper Tests."

Dr. Paul Klemm, in a recent number of the *Wochenblatt fur Papierfabrikation* has a good deal to say on the question of the specific gravity or density of paper, especially with regard to the recently published "C. B. S. Units and Standard Paper Tests" of Messrs. Cross, Bevan, Beadle and Sindall.

In the first place he seeks a plain answer to the question :—"What does a knowledge of the density of paper tell us? The density of a pure homogeneous substance at a definite temperature is an unalterable constant. Hence its value, applied for instance, as a test for the purity of a substance. Paper, however, is not a pure homogeneous substance, but a variable number of variable substances in variable states of aggregation. Even in the simplest case of an unsized paper there are present fibres, moisture, air and impurities, while in addition there may be sizing, colouring matters and fillers. The density in fact will vary within wide limits. It will be dependent on a number of separate and independent values, such as the number of the constituents and the proportions in which they are present, and also the completeness with which the air spaces have been removed from the paper. In short, in answer to the above question, a knowledge of the density of a paper tells us absolutely nothing. If instead of the density (apparent specific gravity) of the paper we measure the average density of the solid matters that go to form the paper (actual specific gravity), we have a measure for the air content.

The next question takes the form :—"What is the use of knowing the air content of a paper?" It might be expected that the air content or porosity as regards fluids would be of importance in relation to blotting or filter paper. Or further a relation between air content and opacity would follow from the rays of light suffering frequent reflection on the surface of the air filled pores in its passage through the paper. In these directions results of practical value may possibly follow, but of what use can be the determination of air content in an ordinary paper? Can it be said of two papers that the one with the higher air content is the better or *vice versa?* Further, the distribution of the air spaces, whether as small fine pores or large coarse ones is, to say the least, of as great importance as the volume of the air spaces taken together. In the "C.B.S. Units" the results are expressed as the relation between fibre volume and total volume. This varies between 1·2 and 3·6. Would not this value have been better expressed if the total volume had been taken as 100? Then the fibre volume and air space would have been given by numbers standing for the percentages of the whole volume occupied respectively by the fibre and air.

In the values for "bulk" the mineral content is taken no account of. This is justified on the questionable assumption that the mineral occupies a portion of the space which otherwise would have been filled with air had no mineral been present. There are no figures given which prove this assumption. Undoubtedly the mineral fillers strongly influence the resulting paper and the value for bulk takes no account of this. But there are further deficiencies. The value can only hold for unsized papers, for the fibre is calculated as the difference between the total volume and the ash. To begin with the volume of the ash is not that of the fillers and is usually much smaller from loss of moisture, etc. Leaving this for the moment, the difference only represents the fibre volume when the paper contains only fibre and mineral as solids, *i.e.*, when it is unsized. Can this factor really be neglected? It can exceed 10 per cent., and sizing substances are usually light materials. This error is of varying and considerable magnitude. As already pointed out, it can only be sufficiently reliable for unsized papers.

The figures for ash give some striking results. One of the highest values for the density is 1·254 for a writing paper with only ·9 per cent. ash. Its density is not far removed from that of a printing paper (dens. 1·265) with an ash 30·9 per cent. Another paper ash = 18·2 per cent. has a density of only ·617, which is lower than a paper (dens. ·687) with only ·8 per cent. ash.

It would have been expected that regularities would be apparent in the "density ratio" or ratio of the sum of the volume of fibre and ash to total volume. The author has calculated this in a number of instances without obtaining any definite or noteworthy results.

With regard to the accuracy of the figures given, the most important are those which form the basis of the determination of the relation between weight and volume (area × thickness). Thus—

$$\frac{\text{weight}}{\text{volume}} = \frac{\text{sq. metre weight in grms.}}{100 \times 100 \times \text{thickness in cm.}} = \frac{\text{sq. metre weight in grms.}}{100{,}000 \times \text{thickness in mm.}}$$

The accuracy is dependent on the figure for the thickness. There are instruments capable of accuracy sufficient for the purpose, but the *nature* of the surface of the paper would interfere very considerably. The author's method of measuring the thickness of ten sheets does not obviate this difficulty, under certain circumstances the reverse. For the further calculation of air volume and fibre volume on which great stress is laid, hypothetical assumptions are made. What allowances are there for sizing materials and moisture which together can occupy 10 per cent. or 15 per cent. of the total volume? Is the per cent. of ash a measure of the volume of the fillers commonly used? These latter on ignition often suffer considerable changes, lose chemically combined water, etc. The specific gravity

Digitized by Google

of the fibre is taken as 1·5. We know that it lies in the neighbourhood of this figure, but different determinations vary within considerable limits. This figure, 1·5, by division into the weight of fibre and multiplication by 100, serves to calculate the fibre volume. How this can vary may be seen thus: –

Assuming density of fibre 1·5 gives 26·7%
then ,, ,, ,, 1·6 ,, 25·0%
and ,, ,, ,, 1·4 ,, 28·6%

This on the assumption of the lowest value (·4 grms.) fibre per cc. paper.

Taking the highest figure (·9 grms.) per cc. we have:—

Assuming density of fibre 1·5 gives 60 %
then ,, ,, ,, 1·6 ,, 56·3%
and ,, ,, ,, 1·4 ,, 65·7%

Again an average of 2·5 for the density the mineral substance or filler is assumed while fillers in common use vary between 2·2 and 4·5 Thus with ·07 grms. per 1 cc. paper the volume of the mineral substances will vary as follows:—

Assuming the density to be 2·5 gives 2·8%
or ,, ,, ,, ,, 4·5 ,, 1·6%
and ,, ,, ,, ,, 2·2 ,, 3·2%

It will be seen what large errors and uncertainty are in this manner introduced. The authors have pointed out the relation existing in the values determined for "breaking length" and "density." This would have been sufficiently obvious from an examination of the theoretical relation of these values for the breaking length already contains the element of density.

The authors wish to replace the "breaking length" as a unit for breaking weight per unit area as is done with other materials, but it must be pointed out that this necessitates the determination of thickness which, as already shown, is not capable of any degree of accuracy.

Henry P. Stevens.

[A reply by Mr. Clayton Beadle to Dr. Klemm's criticism will appear in next week's issue of the *World's Paper Trade Review.*]

MacDonald's Turbine Co., Ltd.—This company has been registered with a nominal capital of £3,500 in £10 shares. The registered office is at 137, St. Vincent-street, Glasgow.

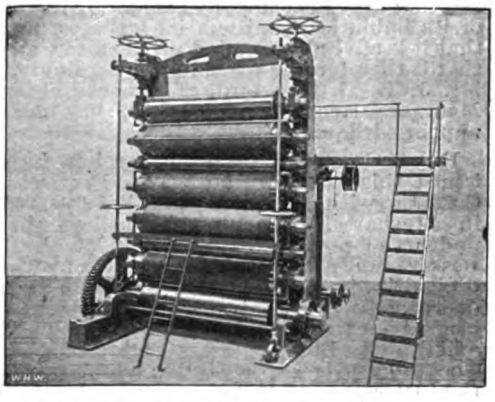
The Gas Power and By-products Co., Ltd.—Registered with a capital of £6,000, in £5 shares. Object, to manufacture gas, ammonia, sulphate of ammonia, and other by-products and chemicals. Registered office: 116, Hope-street, Glasgow. No initial public issue.

"Ceilinite."—A new fireproofing material known as "Ceilinite" has been placed on the market by the H. W. Johns-Manville Co., of New York. It is made from specially prepared asbestos in pieces ¼ to ⅜-in. thick, 36-in. wide, and about 50-ft. long. It is designed especially for fireproofing ceilings in electric cars, and may be used for lining partitions, ceilings, sidewalls, and at any point where a flexible fire barrier is required.

Railway Rates.

The annual general meeting of the Mansion House Association on Railway and Canal Traffic was held on Tuesday afternoon, at the Westminster Palace Hotel, the chair being taken by Sir William E. M. Tomlinson, M.P., who was re-elected Acting President of the Association. Questions relating to through rates, owners' risk, "split deliveries," the dissection of inclusive railway rates, canals, and Private Bills were discussed among other matters, and it was reported that the Railways (Private Sidings) Bill, which had been introduced in the House of Commons at the instance of the Association, had been considered and amended by the Standing Committee on Trade, and that it would come before the House for consideration on June 17th. It was resolved to bring before the Board of Trade numerous cases in which Railway Companies had failed or refused to analyse or "distinguish" their rates in response to applications made to them under the Railway and Canal Traffic Act, 1888.

James Milne & Son, Ltd.
MILTON HOUSE WORKS,
EDINBURGH.
Papermakers' Engineers.



Telegrams:—"MILNE, Edinburgh."

"TASCHEN-HILFSBUCH
unentbehrlicher
WOERTER DES PAPIERFACHS."
Technical Dictionary of Paper Trade Terms, in German and English, by E. A. HOPKINS.
Octavo, Post Free 9d.
W. JOHN STONHILL & Co., 58, Shoe Lane, London, E.C.

Digitized by Google

WORLD'S PAPER TRADE REVIEW.
Office: 58, Shoe Lane, E.C.

TRADE NOTES.

"SUGGESTION BOXES" IN PAPER MILLS.—A correspondent writes that two awards of £5 each have been made to employees who had contributed items of value to the "Suggestion Boxes" placed in the Sittingbourne paper mills of Messrs. Edward Lloyd, Ltd.

FIRE AT A LONDON RAG WAREHOUSE.—On Friday morning the firemen were engaged at a fire which broke out at the Tower Bridge Works, Mill-street, Dockhead, Bermondsey. The property first attacked was that of Messrs. Howes, White, M'Cue and Co., Ltd., rag merchants, the fire breaking out in a building of four floors, measuring some 150-ft. by 50-ft., and the building was virtually destroyed. The fire was prevented from spreading.

WEIGHING PAPER WITH GOODS IN THE GROCERY TRADE.—For including paper bags in weighing goods, Samuel Stone, a grocer, of Chiswick, was fined 40s. and costs at the Brentford Police Court, last week, after three days' hearing. It was a test case, involving the validity of a trade custom. The Court held that there was no evidence of practice generally, or that it was understood between vendor and purchaser.

FAL RIVER CHINA CLAY CO., LTD.—The following resolution has been duly passed by the members of the above company:—"That it has been proved to the satisfaction of this meeting that the company cannot, by reason of its liabilities, continue its business, and that it is advisable to wind up the same, and that it therefore be wound up accordingly." Mr. J. H. G. Crawford, of Star-chambers, Moorgate-street, London, E.C., has been appointed liquidator.

PEAT COAL.—The prospectus has been issued this week of the Electro-Peat Coal Co., Ltd., with a nominal capital of £130,000, in £1 shares. The directors believe that under the process, patented by Mr. J. B. Bessey, and acquired by the company the difficulties in dealing with peat have been overcome. Practical demonstrations have been given at the works of Messrs. Johnson and Phillips, Ltd., engineers, Charlton, Kent. The process is expected "to revolutionise the fuel supply of this country, and indeed of the whole world," but from criticism published in the electrical press it is evident that many well-informed authorities are very sceptical. The registered offices, *pro tem.*, are at 32, Victoria-street, Westminster, London, S.W.

EGYPTIAN SALT AND SODA CO., LTD.—It is stated that there is a scheme on foot "to take the control of the company's affairs out of the hands of the English management, with a view to forcing an amalgamation with certain foreign concerns in Egypt, who, as competitors of the company in their soap and oil business, have undoubtedly suffered somewhat severely. The desirability of acquiring and controlling the valuable salt monopoly at present enjoyed by the company, which forms a constant and ever-increasing revenue," is also stated to be one of the principal aims of the scheme.

BORAX CONSOLIDATED, LTD.—The directors announce an interim dividend at the rate of 10 per cent. per annum, less income-tax, for the quarter ended December 31st, payable on May 2nd.

THE LIVERPOOL CORPORATION AS WASTE-PAPER DEALERS. — At the Corporation Health Committee meeting last week, Mr. A. Shelmerdine presiding, it was reported that arrangements were being made to distribute sacks to warehouse-keepers and offices for the reception of waste paper. The Corporation propose, after collecting the paper refuse in this manner, to sell it to dealers in waste paper, and thus convert material which has up to the present been simply consigned to destruction, into a source of revenue. The Chairman and Alderman Roberts pointed out that this step was one instance of the value of deputations visiting other municipalities, as it was from Glasgow, where the Corporation net £1,500 a year in this way, that they learnt the idea.

FIBRES, LTD.—Registered with a nominal capital of £10,000, in £1 shares. Object, to carry on the business of manufacturers of and dealers in fibre machines and other machinery and implements, mechanical engineers, tool makers, cotton-merchants, spinners and doublers, wool, flax, hemp, and jute spinners and merchants, linen manufacturers, worsted spinners and manufacturers, yarn merchants, etc. No initial public issue. The first directors (to number not less than three nor more than ten) are to be appointed by the signatories. Qualification, five shares. Remuneration, £100 each per annum (chairman £150) and 10 per cent. of the net profits available for distribution after 10 per cent. dividend has been paid, divisible.

WE have received a copy of the pocket edition of the "Directory of Papermakers" for 1904. We recently referred to the care taken by the publishers, Messrs. Marchant Singer and Co., in preparing this directory of the paper mills of the United Kingdom, a feature of which is the inclusion of trade designations used as watermarks, etc., by papermakers and wholesale stationers. The pocket edition gives the same information as in the ordinary directory, the type being reduced, and it will be found of great service to travellers and others who are frequently visiting paper mills.

SAMUEL MEGGITT AND SONS, LTD., NOTTINGHAM.—Trust deed registered April 16th, for £30,000 five per cent. debenture stock; trustees: H. E. Thornton, banker, of Nottingham, and J. Birch, bank manager, of Mansfield; charged on freehold property, mills, and machinery in Sutton-in-Ashfield, and all other assets, including the uncalled capital.

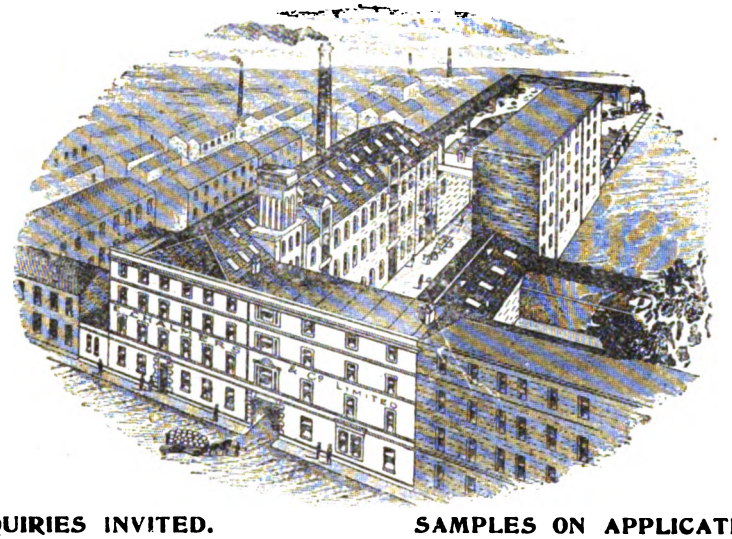
Digitized by Google

Telegrams: "GILES, LEITH." Telephone: No. 465.

E. CHALMERS & Co., LIMITED.

BONNINGTON, LEITH.

Linen Rags,
Cotton Rags,
Canvas,
Hemp Ropes,
Manilla Ropes,
Jute & Flax Bagging,



Woollen Rags, For Filter and Silurian Papers.
New Linen and Cotton Cuttings,
Waste Papers,
Paper Shavings &c., &c.
All thoroughly well classed.

ENQUIRIES INVITED. SAMPLES ON APPLICATION.

N.B.—CASH OFFERS made for Disused Paper or other Works for Dismantling purposes.

WILLIAM MAKIN & SONS,

Attercliffe Steel Works, Sheffield, England.

(ESTABLISHED A.D. 1736).

PAPERMAKERS' STEEL and BRONZE TOOLS.

Illustrated Catalogues and Price Lists, in French and English, on Demand.

Remington Typewriter.

THE BUSINESS BUILDER.

(Write for Particulars).

100, GRACECHURCH STREET, LONDON, E.C.
253, OXFORD STREET, LONDON, W.

Now Ready. 44th Edition. Price 2/6 net, Post Free.

THE PAPER MILLS DIRECTORY for 1904,

Containing a List of the Paper Mills in the United Kingdom, with Full Particulars of their Manufacture, and much useful Information in connection with the Paper Trade indispensable to all connected therewith.

London: SIMPKIN MARSHALL & Co., Limited, Paternoster Row: and all Booksellers

Also for remittance of Stamps or Postal Order of the Editor, 27, Pilgrim Street, Ludgate Hill, London E.C.

Digitized by Google

Stocks and Shares.

The following report is supplied by Mr. F. D. Dean, stock and share broker, 36, Corporation-street, Manchester. (Telegrams: "Fredean, Manchester;" 'Phone, No. 2180).

PAPER, &c.

Amount Paid.	Nominal Amount.	Name of Company.	Dividend last half-year.	Prices Apr. 27.
			%	
£ 1	£ 1	Annandale & Son ord.	10	24/6—25/6
5	5	do. do. pref.	5	5⅛—5⅜
100	100	Bergvik Co., 4½% debs. Nos. 1—3,000	4½	98—100
10	10	do. do. deferred	16	12½—13⅜
10	10	do. do. 6% cum. pref	6	10⅝—11⅛
4	5	Burnley Paper Co.	12½	7⅛—7⅜
7	7	Bury Paper, ord.	nil	6¼—7⅛
7	7	do. 6% pref.	nil	7—7⅛
5	5	Darwen Paper Mill Co. "A"	10	10⅛—10⅝
3⅜	5	do. do. "B"	10	7⅞—8⅛
1	1	do. "C" issued at £1 pm.	10	2—2⅛
10	10	E. Lancashire Paper Co.	10	14½—15
10	10	do. do. 6% pref.	10	14½—15
5	5	do. do. bonus	5	4⅛—4⅛
3	5	Kellner-Partington Co.	15	9- 9⅛
5	5	do. do.	15	16 - 16⅛
100	100	do. do. debs. (red. 1914)	4½	102—103
5	5	N. of Ireland Paper Co.	10	6⅛—7⅛
5	5	Olive & Partington 5% pref.	5	5⅛—5⅜
7	10	Olive Brothers	nil	5⅛—6⅛
10	10	do. do. fully paid	nil	8⅛—9⅛
5	3	do. do. pref.	10	4- 4⅛
1	1	Owen, T. & Co. 6% pref.	6	17/0—18/0
100	100	do. do. debs.	5	94—96
5	5	Peebles (A. M.) & Son	4	3⅜—3⅝
5	5	do. 5% cum. pref.	5	4⅛—4⅜
100	Stock	do. 4½% deb.	4½	96—100
3	5	Ramsbottom Paper Co.	10	5⅜—5⅝
1	1	do. do. cum. pref.	5	21/0—22/0
4½	5	Roach Bridge Paper Co.	10	5⅛—6⅛
5	5	Star Paper Co.	10	8⅛—8½
3	5	do. do. cum. pref.	10	6—6½
100	100	do. do. deb. stock	4½	99—100
10	10	Spicer Brothers cum. pref.	5	9⅛—10
10	10	Waterlow & Sons non.-cum. def.	12½	18⅛—19⅛
10	10	do. do. non.-cum pref.	4	12⅛—13
10	10	do. do. cum. pref.	3½	8—8⅛

CHEMICALS, &c.

£ 1	£ 1	Brunner, Mond & Co.	30	5 1/16—5⅛
10/-	1	do. do; "New"	30	2 9/16—2⅝
10	10	do. do. 7% cum. pref.	7	17—17½
1	1	Castner-Kellner Alkali Co.	nil*	14/3—14/9
100	Stock	do. do. 4½% deb.	4½	90- 92
5	5	Clayton Aniline ord.	5	2⅞—3⅛
5	5	do. do. cum. pref.	nil*	4- 4⅛
1	1	Electrolytic Alkali ord.	nil	5/0— 5/6
1	1	do. do. 7% pref.	nil	11/6— 12/6
5	5	Langdale's Chemical Co. Ld	2½	25/6—26/6
9	10	Lawes Chemical ord.	4½†	3½- 3⅞
10	10	do. do. pref.	7	9⅞- 10
4	4	Salt Union ord.	nil	11/6 12/0
6	6	do. 7% non.cum. pref.	6/-	3⅛- 5⅜
100	Stock	do. 1st mort. deb.	4½	85½- 85⅞
100	,,	do. "B" mort. deb.	4½	82 84
10	10	Steiner (F.) & Co. ord.	*nil	6- 7
10	10	do. do. cum. pref.	5	7⅛- 7⅜
100	Stock	do. do. deb. stock (red. 1912).	4	84½ 85⅛
10	10	United Alkali Co.	nil	21/6—22/6
10	10	do. do. cum. pref.	7	7¼- 7½
100	Stock	do. mort. deb. (red. after 1907)	5	97½—98
1	1	United Indigo & Chemical	nil	3/3—3/9
1	1	do. do. 6% cum. pref.	‡6	8 3—8/9

* Interim † For year. ‡ Div. to 31/12/02.

There is still very little to report in the Paper Share Markets, with little or no business passing. Darwen issues are rather enquired for, and the "B" are up ¼ at 8, whilst there are buyers of "A" at 10¼. Kellner-Partington Debentures have risen a point to 102½, but the shares are unchanged. Waterlow and Sons preference are again down ¼ at 8¼ with business at even less than this figure. Star ordinary still wanted, but no shares offered.

In Chemical securities there has been a fair amount of business, but the high prices of last week have not been maintained, in fact one or two concerns are down at their old level. Brunner Monds have proved the exception, however, and the old are ⅛ up at 5 1/16 bid, and the new 1/16 better at 2 9/16 bid, presumably on dividend forecasts. Castner-Kellners, which also should be announcing their dividend for the whole twelve months past, are down 3d. at 14s. 6d. with business marked at the price. Salt Unions, after being very strong a week ago, have dropped to their old price of 11s. 9d., or 1s. 9d. down from last week's quotation, whilst the preference are lower by ¼: the 1st Debentures are unaltered, though the 2nd Debentures mark an advance of 2 at 83. Steiner's also are down ⅛ at 7⅛, but the Debenture Stock is firm at 85. United Alkali have been very active, though at much lower quotations, the ordinary having lost as much as 1s. 9d., and the preference quite ⅜, whilst the Debentures are down ¼ at 97½. United Indigo's on the other hand have been firm, and the ordinary have improved 1s. 3d. to 3s. 6d., and the preference show a gain of a like fraction at 8s. 6d.

SALT UNION, LTD.—It is announced that eleven additional pans at the Salt Union's Winsford works have been restarted, and that employment in the Cheshire salt trade is better, and gives brighter promise than for some time past. The Cheshire statistics for the past month also show an increase of exports and coast shipments, amounting to 7,042 tons.

SUTCLIFFE BROS'. *TESTED SPECIALITIES.*
TRY THEM—IT WILL PAY YOU.

"ECLIPSE" BELTING CREAM.
Prevents Slipping, Increases Power. "A real gain."

"LION" LEATHER LACES.
Unequalled Strength. "Always soft, seldom break."

"LION" LEATHER BELTING.
Extra Strong & Durable. Excels for Double Belts.

"CLIMAX" LUBRICATING CREAM.
Supersedes Oil. Saves 25 to 50 %. No Dirt or Waste.

"CLIMAX" WHEEL GREASE.
Does not Cut, Clog, Fly or Dry. Always alike.

"CLIMAX" BOILER FLUID.
Effective, Economical, Reliable and Harmless.

"TELLURIC" CEMENT.
For Covering Boilers, Piping, &c. Most Durable. Saves Entire Cost several times every year.

Albert Works, Godley, near MANCHESTER.

Digitized by Google

SPECIAL PREPAID ADVERTISEMENTS

IT IS IMPORTANT that Advertisements under any of the Headings mentioned below should reach us by the first post on Thursday to insure insertion the following day.

SITUATIONS WANTED—Charges for advertisements under this heading are One Shilling for twenty-four words, and One Penny per word after. Minimum charge One Shilling. Three Insertions are given for the price of two. Cash to be sent with Order.

SITUATIONS VACANT, BUSINESSES WANTED or FOR DISPOSAL, MILLS WANTED or TO LET, MACHINERY, and MISCELLANEOUS—Charges for Advertisements of the above class are Three Shillings for fifty words or under; One Shilling extra for every line or portion after. Ten words to be reckoned for each line.

OFFICES—58, SHOE LANE, LONDON, E.C.

Situations Vacant.

MANAGER Required for up-to-date mill, at present small, but large extensions in view. Must be competent to take entire charge (inside only) of manufacturing departments. Close knowledge of Wood Pulp Papers, latest methods and makes, and manufacturing costs. Moderate salary with bonus on results. Fullest details required and applications treated with strict confidence. —Apply, "Managing Director," c/o Alex. Wright and Co., Incorporated Accountants, 34, Gresham-street, E.C. 9438

Situations Wanted.

BLOTTINGS.—A Gentleman, with ten years' practical experience in a Blotting Mill, requires employment; can initiate and superintend the manufacture from start to finish; buying and selling. —Address, No. 9,437, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9437

CLERK, German (23), some knowledge of the Paper Business, requires Situation; highest references. The first few months without remuneration.—Address, No. 9,433, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9433

ENGINEER and Millwright, well up in Paper Mill Work, several years as head engineer in large Mills, requires Situation.—Address, No. 9,421, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9421

FINISHER, age 24, seeks Situation; used to S.C. Printings, Browns, Blottings, etc.; capable of taking charge; good references.—Write, stating wages, H. Dyer, 3, Anglo-cottages, Purfleet, Essex. 9436

MACHINEMAN desires change; used to Super-Calendered Printings or Glazed Casings, etc.; strictly steady and married.—Address, No. 9,420, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9420

PAPER MILL MANAGER wants Re-engagement; thoroughly experienced in Ropes, Browns, Bag Papers, Glazed Packing, Shops, Paper made all from Wood; strictly steady, and excellent testimonials.—Address, No 9,428, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9428

PRACTICAL FOREMAN seeks Situation; experienced in Ropes, Shops, all classes of Browns; at present in small Mill.—Address, No. 9,416, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9416

PRACTICAL MANAGER seeks Re-engagement; experienced in Printings, S. C. Whites, Creams, Cartridges, Coloured Printings, Sulphite Papers, the Preparing in every Department; first-class testimonials. —Address, No. 9,427, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9427

PRACTICAL Paper Mill Foreman requires Situation; M.G. Caps, Manillas, Casings, Drabs, Cutlery, Imitation Parchment, Hosiery, High-class, Frictioned Glazed; capable of taking entire charge; steady; testimonials.—Address, No. 9,429, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9429

TO PAPERMAKERS. — Practical Machineman, with family of workers, seeks Situation as Working Foreman, Night Foreman, or Machineman; Browns, Shops, Caps, Casings; abstainer; reliable.—Joseph Allen, opposite Church, Ecclesfield, Sheffield. 9435

WANTED, Situation as Cutterman or Reelerman; thoroughly experienced; first-class references; capable of taking Foreman's place in this capacity.—Address, No. 9,419, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9419

WANTED, Situation as Fitter and Turner (age 25) in Paper Mill; good all round experience; good references.—Address, No. 9,415, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9415

Machinery.

FOR Delivery about June, one 10-ft. by 7-ft. 4-in. wide Drying Cylinder, by Bertrams, with pedestals, driving gear, complete. Can be seen working by appointment.—Apply, Fisher and Co., Ltd., Tamworth. 9413

FOR SALE, Modern Paper Machine, to take 72-in. wire; six drying cylinders, 4½-ft., two of 4-ft.; set of five chilled rolls; circular frame to cylinders; three wrought-iron knotters; vertical steam engine; 20-ft. Cornish boiler, lately insured at 75-lbs. Above, in good order when shut down, offered great bargain.—James Mead, Paper Mills, Penryn. 9424

FOR SALE, Several Second-hand Dandy Rolls, equal to New.—For full particulars and sizes, write to T. J. MARSHALL & Co., Campbell Works, Stoke Newington, London, N.

Also Several Second-hand Red Rubber Deckle Straps.

If you WANT A DANDY ROLL QUICKLY, Telegraph "DANDYROLLS, LONDON."

Telephone Number: 79 "Dalston." 6288

ONE Cornett's Patent Cone Breaker for Sale; complete, in thorough good order.—Apply for full particulars to No. 9,431, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9431

WANTED, Kollergang; must be in good condition.—Address, No. 9,430, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9430

WANTED, large Washing Engine and Nuttall Chopper, in good condition.—Address, No. 9,432, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, E.C. 9432

Miscellaneous.

JOHN FULTON & CO., Engravers of Rollers for Printing Wall Papers, etc., also of Rollers for Embossing all kinds of Paper.—Knowsley Street Engraving Works, Manchester.

FOR SALE.

CONDENSING STEAM ENGINE, suitable for driving a Papermaking Machine.

4 CAST IRON CENTRIFUGAL PUMPS, 2-in. bore.

5 HARD-GRAINED CALENDER ROLLS, 18-in., 11-in., 12-in., 11-in. and 14-in., by 103-in.

4 CHILLED CALENDER ROLLS, 11-in., 12-in., 14-in. and 16-in., by 78-in. long on face.

3 CHILLED ROLLS, 12-in. and 11-in., by 70-in., and 12-in. by 69-in. long on face.

2 HARD-GRAINED ROLLS, 12½-in. by 104-in. long on face.

1 HARD-GRAINED ROLL, 18-in. by 98-in. long on face.

Apply to BERTRAMS LIMITED, (1)
St. Katherine's Works, Sciennes, EDINBURGH.

Digitized by Google

ATTENTION

is respectfully invited from all Manufacturers to our

NEW SYSTEM OF

LUBRICATING BEARINGS.

Those contemplating a change in their Bearings or Building New Works, should CONSULT US before deciding, as we have the

MOST UP-TO-DATE SYSTEM IN EXISTENCE.

The numerous attempted imitations prove its Excellence.

Address:—

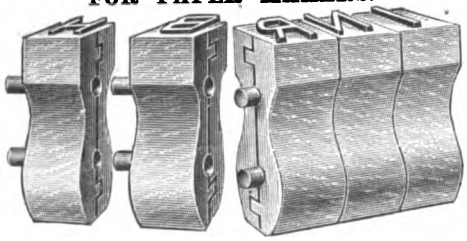
DIAMOND LUBRICATING Co., LTD.,
94, Market Street,
Telephone 4886. MANCHESTER.

WILLIAM VARCOE
REGISTERED
AND SONS,
STOKE-ON-TRENT,

CHINA CLAYS

For PAPER-MAKERS.

WINNETT'S
Patent Transposable Stamps
FOR PAPER MAKERS.



Makers of Rubber, Metal, Wood, and Flexible Stamps.

WINNETT'S NATIONAL STAMP CO.,
125, London Road & Sugar Lane, Manchester.

The World's Paper Trade Review
A WEEKLY JOURNAL FOR PAPER MAKERS & ENGINEERS.

ESTABLISHED 1879.

No. 1219 OLD SERIES.
No. 1164 NEW WEEKLY SERIES

☛ THE LEADING JOURNAL
☛ For the British Paper & Pulp Industries.

Printed and Published EVERY FRIDAY by W. JOHN STONHILL & CO., at 58, Shoe Lane, London, E.C.

Subscription: £1 per Annum, post free to any part of the world.

REPRESENTATIVE FOR THE LANCASHIRE, YORKSHIRE, AND MIDLAND DISTRICTS:
MR. THOMAS FOSTER,
4, BOWKER STREET,
HIGHER BROUGHTON, MANCHESTER.

FRIDAY, APRIL 29, 1904.

PRINCIPAL CONTENTS.

	PAGE
Matters of Interest	1
Opacity of Paper	2
Acidylised Cellulose	3
Exports of British Paper	3
British Imports of Foreign Paper	6
American Imports of Paper, Paper Stock, Chemicals, Etc.	6
Punalur Paper Mill, Travencore, S. India	8
Esparto Trade	8
Bergvik Co., Ltd.	10
The Proposed China Clay Syndicate	10
Commentarium	12
"C.B.S. Units and Standard Paper Tests"	14
Trade Notes	16
Stocks and Shares	18
Leaderettes	20
Wood Pulp Industry	25
National Union of Paper Mill Workers	26
New British Patents	26
Servia's Imports of Paper	27
Market Reports	28
Gazette	28
Current Prices of Papermaking Materials	29
Our Foreign Post	32
British Imports of Chemical and Mechanical Wood Pulp	34
Patent Self Oiling Bearings	36
Commercial Intelligence	37
New Limiteds	39
General Notes	40

FOR LIST OF ADVERTISERS
See Page 23.

Employment of Young Persons in Paper Mills.

CONSIDERABLE interest in the matter of employing young persons in paper mills has been created in the trade owing to the prosecution of Messrs. Charles Marsden and Sons,

Digitized by Google

Ltd., of Barnsley, who were recently fined a nominal penalty of 5s. and costs for not allowing the recognised intervals for meals according to the provisions of the Factory and Workshop Acts. The contravention, it was stated, was innocently committed, and the custom it was believed was general in the majority of paper mills throughout the country. Exception is taken by several correspondents as to the practice in vogue at Messrs. Marsden's mills being regarded as a "recognised custom" in the trade, and, as far as Lancashire is particularly concerned, we are informed that very few mills will be found to employ young persons without a break for meals. Taking the Manchester district, we are assured that invariably young persons have time allowed for meals and leave for that purpose, except those working in the night shift, when they have their meals on the premises, but have proper meal hours.

* * *

The Tariff Committee and Papermaking.

The papermaking industry of this country has evidently engaged the attention of Mr. Chamberlain's Tariff Committee. In a leaflet (No. 50), now being circulated, it is pointed out that the growth and development of papermaking in the British Isles is not keeping pace with the increasing demand for home and export, simply because foreign "dumping" makes it impossible. "Foreign manufacturers," we read, "being protected by tariff walls, get such good prices for all they make for their home markets that, by increasing outputs beyond their own requirements, can afford to 'dump' the surplus production over here at prices considerably below cost of those at which British makers can profitably produce similar papers!" The question is asked: "Was this Cobden's idea of Free Trade?" Prominent attention is directed by the Commission to the increasing imports of paper and the dwindling exports. Figures are given showing that the exports of British paper to all countries, including British Colonies, in 1888 were of the value of £1,837,326, and in 1902 £1,672,704, a decrease of 9 per cent.; the imports of foreign paper into the United Kingdom in 1888 were of the value of £1,820,135, and in 1902 £4,537,674, an increase of 250 per cent. The Tariff Committee points out that this means less and less employment for this section of the wage-earning population of the United Kingdom, as British papermakers are obliged to work at cut prices and limit their output to an unprofitable level, and in both cases the workpeople suffer. The remedy suggested is to stop foreign "dumping" by putting a tariff on foreign countries, it being emphasised that this will not in any way increase the cost of living. According to the Tariff Committee, "British mills will regain the home trade, necessitating increased output and providing employment at good wages for more workpeople." Further, "by accepting the offer of Preferential Trading made by our great self-governing Colonies, our exports will improve and grow in the right direction, and thus help to pave the way to the adoption of Free Trade within the Empire!'"

* * *

Papermaking in Scotland.

Some interesting particulars have recently been published by the Edinburgh Chamber of Commerce relating to the paper industry of Midlothian and Fife. Dealing with the Water of Leith, it is stated there are eight mills in the valley—two containing five papermaking machines, running on printings and news, and six, with one machine each, producing brown papers and duplex wrappers. The approximate output of white papers is 11,000 tons a year, the value being returned at about £200,000. The brown mills turn out about 4,000 tons, representing a value of £40,000. In the Valley of the Esk the seven mills on the river contain 17 machines, with a turn out of 25,000 tons of paper yearly of the value of about £750,000. The total number of paper operatives on the Esk is 2,200, one-third being females, and the total wages amount to about £102,000, not including office and management staffs. In Fife there are eight paper mills, six on the Leven, one at Guardbridge on the Eden, and the other at Inverkeithing on the Forth. The manufactures include fine printings, writings, biscuit papers, manilla papers, greaseproof papers, parchments, wrappers, etc. The eight mills contain eighteen papermaking machines, the yearly output being returned at about 23,400 tons, of the value of £538,000.

* * *

The American Paper Trust—Exports to Great Britain.

The demand for an investigation of the so-called "Paper Trust" is a very live topic amongst papermakers and paper consumers in the United States. The officials of the International Paper Co., of New York, are not inclined to pass over without challenge the statements (referred to in our last issue) made by Messrs. Don C. Seitz and John Norris, of the *New York World* and *New York Times* respectively, before the Judici-

Digitized by Google

ary Committee of the House of Representatives at Washington, D.C. The first statement disputed is that 22,000 daily newspapers published in the States were represented by Messrs. Seitz and Norris and the American Newspaper Publishing Association. The International Co. contends that the total number of the daily publications of the country is 2,169. It is emphatically denied that there is any territorial division of the country between the International Paper Co. and the General Paper Co. of Chicago, Ill., and further, it is said to be untrue that consumers are practically dependent on two concerns for their supplies, there being, according to the International Paper Co., ten prominent news paper manufacturing companies in the East, whose daily production is at least 1,000 tons. The International Paper Co. state that it has no control of the mills in the East except those that are component parts of the company, and also that it has no control of prices or product. Mr. Seitz mentioned that when the International Paper Co. was organised a valuation of 22,000 dols. per ton was put on the output of the mills, and that the valuation of modern news mills is based on 12,000 dols. per ton of production. In reply, the International mentions that the Great Northern Paper Co., with a daily production of 300 tons, acknowledges indebtedness of 9,000,000 dols., or 30,000 dols. per ton of production. Mr. Seitz alleged, according to the census of 1900, that 50 per cent. of the timber used by American news mills was imported from Canada, whereas the International state that less than 19 per cent. of pulp wood used in the United States was imported from Canada, and that the importation since that time has not been materially higher. In answer to Mr. Seitz's declaration that there were no paper mills in Canada, the Laurentide Paper Co., the Imperial Paper Mills, the Canada Paper Co., the E. B. Eddy Co., and the Riordan Paper Mills, are mentioned as manufacturing news, the approximate production being given as 200 tons a day. This statement of Mr. Seitz, the International Paper Co. contends, shows how unreliable and erratic his utterances prove to be, as besides the news mills mentioned in Canada, there are many other mills making various classes of paper. The reference to the export trade will interest British papermakers. According to Mr. Seitz, the International Paper Co. was selling paper in London at a quarter of a cent. lower than their New York prices. This the company denies, and says it is not selling in London at prices based upon an average lower than their domestic quotations. On this point, the company maintains that the results of its export division of the sales department show that for the completed year of 1902 the exportation of news printed paper netted the company a greater average return than the paper made and consumed at home. The returns for 1903 were not yet completed, but for this year it is stated they will no doubt be equally favourable. All paper manufacturers, according to Mr. Seitz, have a price of so much a ton for export, but the International denies having at present, or having had in the past any understanding directly or indirectly with other manufacturers on the price of paper for export. Mr. Seitz's statement that the International Paper Co. was capitalised for 55,000,000 dols. on an actual valuation of 20,000,000 dols. worth of property, is pronounced by the company as being flagrantly false, it being alleged that the property of the International Paper Co. could not be duplicated for the par value of all the securities issued against it. The International Paper Co. believe that Mr. Seitz and Mr. Norris stand practically alone in attacking the integrity of the company. Mr. Seitz wants pulp and paper placed on the free list, but at the same time he is not sure that newspaper publishers would then be able to buy paper at cheaper rates.

Canadian Notes.

WRITING from Ottawa, a correspondent states that Mr. J. R. Booth's pulp mill at Chaudiere will shortly be in working order. It is Mr. Booth's intention to immediately proceed with the building of a paper mill, and it is estimated that the entire output of the pulp plant will be utilised.

THE strike at the mill of the Kinleith Paper Co., St. Catherine's, Ottowa, ended in favour of the employers. The mill was not long before it was running full time, most of the strikers being replaced by new hands.

A BOWLING CLUB has been started by the staff of Messrs. R. Robinson and Co., Ltd., manufacturing printers and stationers, Newcastle-on-Tyne. Mr. G. W. McLean, managing director of the firm, is president of the club, while three of the directors act as vice-presidents, and one as chairman of committee. The game of bowls is a popular one in the north, and the new club should be useful, not only in bringing the members of the staff together for social intercourse, but for the betterment of their health by the fresh air and exercise they will obtain while playing on the green.

ADVERTISE in this paper! It pays!!

Digitized by Google

LIST OF ADVERTISERS.

Where number of page is omitted the advertisement does not appear in this issue.

Alkali, Etc. PAGE

Brunner, Mond & Co., Ltd. ... ...
United Alkali Co., Ltd. ... ... *Cover iv.*

Analysts, Experts, Engineers, &c.

Ekman, C. D. 33
Hurst, George H. 35
Sindall, R. W. 33

Belting, etc.

Sutcliffe Bros. ... ...

Boiler Coverings and Composition.

Emmett, James, Ltd. 33
Sutcliffe Bros. ... ...

Chemicals.

Bramwell, E., & Son ... ...
Brunner, Mond & Co., Ltd. ... ...
Pochin, H. D., & Co., Ltd. ... ...
Spence, Peter & Sons, Ltd. ... ...
United Alkali Co., Ltd. ... ... *Cover iv.*

Colours.

Cardwell, J. L., & Co. 35
Cornbrook Chemical Co. 33
Hinshelwood, Thos., & Co. 35
Levinstein, Ltd. 35
Manchester Aniline Co. 35
Pochin, H. D., & Co., Ltd. ... ...
Via Gellia Colour Co. 35

Dandy Rolls.

Green, W., & Son ... ...
Marshall, T. J., & Co. 19

Economisers (Fuel).

Green, E., & Son, Ltd. ... ...

Engines (Steam).

Milne, James, & Son, Ltd, ...

Esparto Pulp.

Grondal, A. L. ... ...

Felts and Jackets (Papermakers').

Huyck, F. C., & Sons ... ...
Kenyon, James, & Son 27
Porritt, Joseph, & Son ... ...
Whitehead, R. R., & Bros., Ltd. ... ...

Mill Refuse, Treatment of.

Liquid Destructors, Ltd. ... ...

Minerals, Etc.

Belvoir and Newark Plaster Co. 35
Best, James, and Sons 35
Birch, W. Singleton, & Son, Ltd. 35
Bodelva and Lantern China Clay Works 35
Cafferata & Co. 35
China Clay Co. 35
Howe, John, & Co. 35
Lassale, Th. 35
Pochin, H. D., & Co., Ltd. ... ...
Rogers, J., & Co. 35
Satinite Co. ... ...
Varcoe & Sons 20
Winser & Co. 35

Miscellaneous.

Directory 35
Machinery for Sale and Wanted 19
Paper Mill Directory 17
Situations Vacant and Wanted 19

Oils and Lubricants.

Diamond Oil Co., Ltd. 20
Sutcliffe Bros. 18

Office and Library Furnishers.

Simpole's 11

Paper and Pulp Making Machinery.

Bentley & Jackson, Ltd. ... ... 4—5
Bertram, James, & Son, Ltd. ... ... *Cover iii.*
Bertrams Ltd. 19
Dietrich, Robert ... ...

Paper & Pulpmaking Machinery— *(Continued)*

PAGE

Fillner, H. ... ...
Lechla, O. ... ...
Marx, J., & Co. ... ...
Masson, Scott & Co., Ltd. 9
Milne, James, & Son, Ltd. ... ...
Voith, J. M. 15
Walmsley, Chas., & Co., Ltd. 9
Wandel, Chr. 24
West End Engine Works ... ...
Wurster, Dr. C. ... ...
Wyss, Escher, & Co. 27
... ... 7

Paper Bag Machinery.

Bumsted & Chandler ... ...

Paper Stock.

Beaumont, J., & Co. 33
Bradford, John S., & Co. ... ...
Caldwell, J., & Sons 33
Chalmers, E., & Co., Ltd. ... ... 17 and 35
Freese, Jean 33
Goodhind, R. & J. 33
Hay, R. H., & Co. ... ...
Hyman Bros. ... ...

Rag Pulps, &c.

Courtelary Wood Pulp Works Co. ... ...

Roll and Plate Engravers, etc.

Fulton, John, & Co. 19

Rubber Stamps, &c.

Winnett's National Stamp Co. 20

Sizing.

Grove Chemical Co., Ltd. 35

Strawboard Centres.

Boyd, Hart & Co. 35

Straw Pulp.

Grondal, A. L. ... ...
Vereinigte Strohstoff-Fabriken ... ...

Tools (Papermakers').

Makin, William, & Sons ... ... 17 and 35

Typewriters.

Remington Typewriter 17

Ventilators, Etc.

Sutcliff Ventilating and Drying Co. 35

Water Supplies.

Abundant Water Supply Co. 35
Isler, C., & Co. 35
Le Grand & Sutcliff ... ... 33 and 35

Wood Pulp.

Actiengesellschaft für Maschinenpapier-Fabrikation ... 9
Alsing & Co., Ltd. 35
Andrews & Co., Ltd. ... ... *Cover i.*
Berner & Nielson ... ...
Forsmarks Cellulose Fabrik ... ...
Grant, W., & Co. ... ...
Grondal, A. L. 35
Hay, R. H., & Co. ... ...
Henderson, Craig & Co., Ltd. ... ...
Johnsen, Jorgensen and Wettre ... ...
Kommanditbolaget C. Fr. Waern & Co. 33
Lovenskiold-Fossum 11
Makin & Bancroft 27
Munds, Wilh. 33
Olrog, Thv. ... ...
Skutselv Cellulosefabrik ... ...
Storviks Sulfit Aktiebolag ... ...
Taylor, F. D., & Co. ... ...
Taylor, W. G., & Co., Ltd. ... ...
Tilsit Zellstoff Fabrik ... ...
Wertheim, A., & Co. ... ... *Cover ii.*
Wood, Harry B. 9

READERS of this Paper who have an **Idea** for a **Patent**, or desire **information** or **Advice** in connection with Inventions, &c., should communicate with the Patent Editor, who will supply full particulars direct by letter, free of charge.

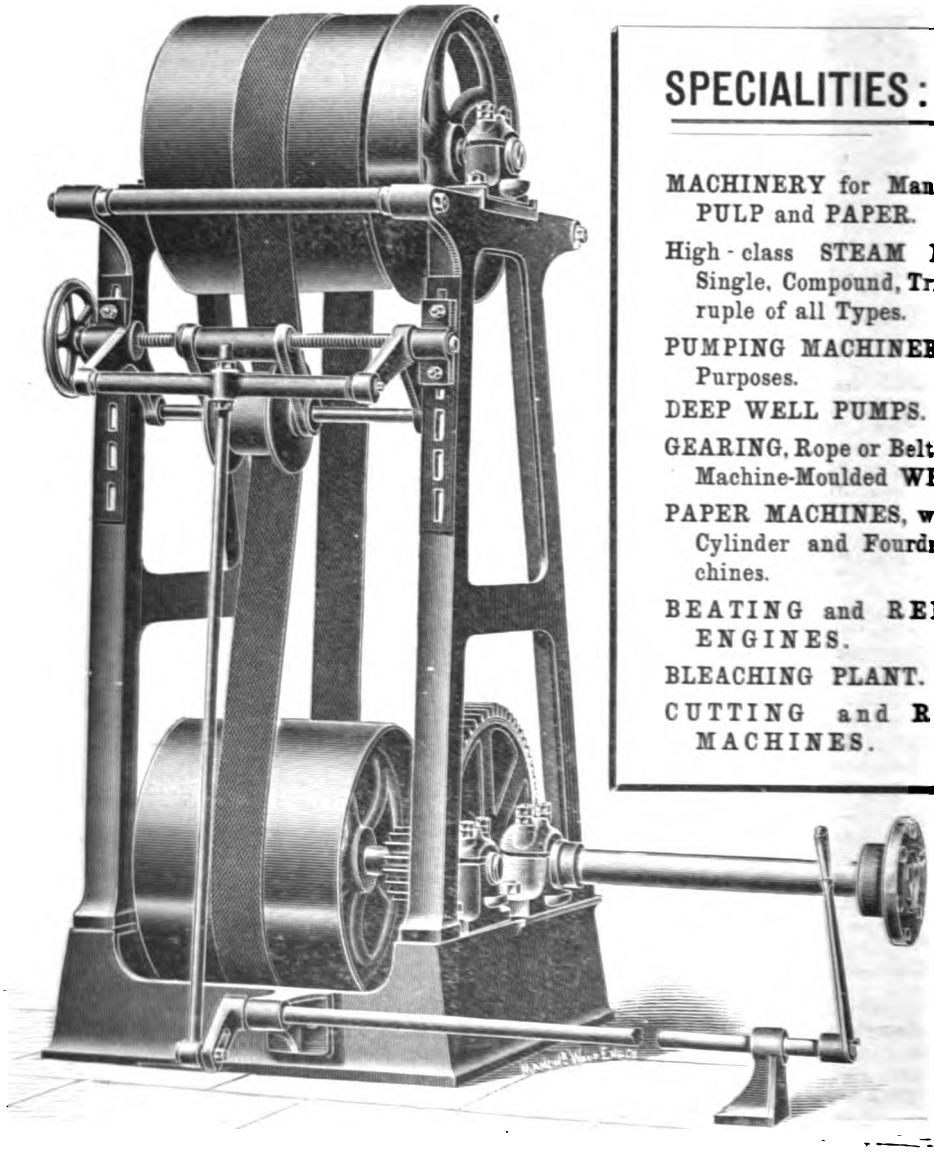
Address: *The World's Paper Trade Review*, 58, SHOE LANE, LONDON, E.C., and write on the left hand corner of the envelope the word "Patents

Digitized by Google

CHARLES WALMSLEY & CO., Ltd.,

Papermakers' Engineers,

BURY, near MANCHESTER.



SPECIALITIES:

MACHINERY for Manufacturing PULP and PAPER.

High-class STEAM ENGINES, Single, Compound, Triple, Quadruple of all Types.

PUMPING MACHINERY for all Purposes.

DEEP WELL PUMPS.

GEARING, Rope or Belt Drive, and Machine-Moulded WHEELS.

PAPER MACHINES, with Single Cylinder and Fourdrinier Machines.

BEATING and REFINING ENGINES.

BLEACHING PLANT.

CUTTING and RIPPING MACHINES.

"Walmsley's" Patent Paper Machine Sectional Drive.

CAN BE SEEN AT WORK.

Digitized by Google

THE WORLD'S

Wood Pulp Industry.

A Weekly Record of the Latest Information of Interest to Manufacturers of Chemical and Mechanical Wood Pulps, Agents, Buyers, and Others.

LONDON: 68, SHOE LANE, E.C.

British Imports of Wood Pulp.

The arrivals of wood pulp at British ports during the week ended April 16th were as follows from the countries mentioned:—

Chemical—Dry.		
Sweden	1,056 tons	£8,666
Norway	790 ,,	6,285
Belgium	113 ,,	925
Prussia	60 ,,	590
Holland	40 ,,	320
Russia	31 ,,	268
Germany	31 ,,	272
Portugal	8 ,,	56
Finland	19 ,,	125
Chemical—Wet.		
Sweden	570 tons	£2,092
Norway	300 ,,	1,350
Mechanical—Dry.		
Sweden	50 tons	£221
Norway	32 ,,	160
Mechanical—Wet.		
Norway	7,489 tons	£16,316
Sweden	60 ,,	130

Scandinavian Chemical Wood Pulp.

In a report of the annual meeting of the Scandinavian Association of Chemical Wood Pulp Manufacturers published in our last issue, the prices agreed upon as being obtainable for delivery next year, c.i.f. London, should read as follows:—Best easy bleaching sulphite, £8 15s.; ordinary strong sulphite, £7 15s. to £8; and unbleached sulphate, £7 15s.

Swedish Export Duty on Wood Pulp.

It was recently announced in the *World's Paper Trade Review* that the Swedish Parliament had sanctioned an export duty of 50 öre on dry, and 25 öre on wet chemical wood pulp, and 30 öre on dry and 15 öre on wet mechanical wood pulp. It is announced that the duties in question will not come into force until January 1st, 1905, and are not to be levied on wood pulp produced from wood felled in the provinces of Gothland, Västerbotten, and Norrbotten, or in the commune of Särna (Kopparberg).

The Waldhof Co. (Germany).

The Zellstoff Fabrik Waldhof, near Mannheim, have under consideration an increase of capital from 9,000,000 to 10,000,000 marks.

Austro-Hungary.

A meeting of the shareholders of the Oesterreichischer Verein fur Cellulose-Fabrikation was recently held in Vienna, when Mr. Vinzenz von Miller, of Aichholz, presided. It was stated that the chemical wood pulp market was not so good as could be desired, but better prices were obtainable than formerly, and a further improvement was considered likely. The profits of the company for 1903 were 190,979 kronen.

American Market.

According to New York advices the chemical wood pulp market continues very firm; an excellent demand is reported both for American and foreign makes. In regard to mechanical, the tone is rather easier, but owing to the absence of offers on the market prices are well maintained.

The Sault Ste Marie Industries.

The Ontario Provincial Legislature on Saturday last passed a bill introduced by the Government providing for the issuing of a provisional loan for the purpose of restarting the Sault Ste Marie industries. The loan has been granted principally in order to restrain American capitalists from securing complete control of the works. In expectation that the bill would be passed, arrangements for reopening the industries were made last week, and the factories will resume operations at once. Many of the

Digitized by Google

[illegible] hands who left the town after the Clerque failure have returned, and no difficulty is being encountered in obtaining all the labour necessary. Under the new system that is to be carried out, it is anticipated that all the success expected by Mr. Clerque when the works were first opened will be realised. The bill provides a guarantee for a loan of [illegible] dols.

National Union of Paper Mill Workers

Annual Conference at Darwen.

The fourteenth annual delegate meeting of this Union (the registered office of which is at 84, Bristol-street, Manchester) was held in the Millstone Hotel, Darwen, on Saturday, April 23rd, Mr. Wm. Haworth presidents in the chair.

The CHAIRMAN, in opening the Conference, expressed his pleasure at seeing such a good attendance of delegates, and hoped that their deliberations that day would result in the increasing of the Union's power and influence.

Mr. [illegible] Whitehead, Bolton, and R. Jones, Bury, were elected scrutineers of delegates' credentials.

The minutes of previous meeting were then read by Mr. Wm. Ross, general secretary, and adopted.

In submitting his annual printed report and return, required by Registrar, which had been audited and certified correct by Mr. J. R. Hesketh, chartered accountant, Manchester, the SECRETARY remarked that they were in the happy position of being able to show a marked increase both in membership and in funds, and their rate of progress, since 1904 came in, had been more than maintained. While that was so, however, he trusted that they would not think of resting on their oars yet, as there was ample scope for organising in almost every district. The executive and himself were especially anxious to extend their field of work in the Midlands and South of England, and much help might be given if those who had friends there would get them to correspond with the General Secretary with a view to an organising visit from him. Mr. Ross said he would be very glad to come and address [illegible] anywhere [illegible] [illegible] advantages [illegible]

The report was then considered and passed [illegible]

The following resolutions were then [illegible]

[illegible]

"That power be given to central executive to extend free entry as long as they considered advisable.

"That the central executive be empowered to award framed emblems to members for valuable services, apart from the usual presentation to the member making most members in each branch each year, and that each branch be presented with a framed copy to hang up in club house where the members meet regularly.

"That our general secretary attend and represent our Union at the International Congress of Papermakers, to be held at Amsterdam in August next, for the purpose of receiving information as to wages and working hours in different countries and to support the movement for a general eight hour day and no Sunday labour.

"That we do not send replies to the questions in circular received from Tariff Commission as it has ignored labour representation and desires to tax the workmen's food."

The question of next place of meeting was left to the central executive, as was also the fixing of the form that next season's football competition would take.

Mr. [illegible] Wrigley, Stalybridge, was elected to fill vacancy on executive.

Hearty votes of thanks were awarded to the Press for valuable help given during the year, and to the chairman for presiding.

New British Patents.

APPLICATION.

[illegible] A pulp washing and filtering machine. [illegible]

PATENT SPECIFICATION PUBLISHED. 1903.

[illegible] Apparatus for washing felts of papermaking and the like machines. White and Blaine.

PULP FROM FURZE.—A British patent has been granted relating to the treatment of furze for obtaining a food for cattle, paper pulp, and an ammonium salt which may be used as a manure. The claim of the patentee (Mr. [illegible] Morteloup) is as follows:—A method of treating furze which consists in cutting off from it the tops for use in feeding cattle, and submitting the stalks to the action of a lye of caustic soda, then washing and bleaching them in order to obtain a pulp for paper, the said lye being collected and evaporated in order to recover the soda; the volatile products evolved during the evaporation being caused to pass over coke impregnated with sulphuric or other acid in order to collect, in the form of a salt, the ammonia which they contain.

WEAVING OF WIRE CLOTH.—Improvements in looms, and more particularly to [illegible] for the weaving of wire [illegible] such as is used in paper machines, [illegible] by Mr. [illegible] S. Greenleaf, of the

Digitized by Google

United States, who has recently been granted an English patent. It is stated that the wire from which the cloth is fabricated will not become, in the actions to which it is subjected in weaving, harsh and refractory. The improvements more particularly pertain to new organisations, in the loom, of the mechanism for imparting the peculiar beating-up motions to the lay; of frictionally acting devices comprised in one of the beams whereby it may have a degree of yielding or slipping motion to accord with any variability occasioned by the building on to the beam of excessive convolutions of the made fabric or of the warp wires, accordingly as the friction device is on either or both of the beams; and of the picker or shuttle actuating mechanism.

Servia's Imports of Paper.

The British Vice-Consul, Mr. Thesiger, in a recent report to the Foreign Office, states that the value of the paper imported into Servia varies little, and in 1902 amounted to £52,253, as compared with £52,698 for the preceding year. Of this amount Austria-Hungary supplied £33,477; Germany, £6,610; France, £8,596. There being no paper manufactory in Servia, all is imported and the demand is in consequence steady if not large. Paper of the finer qualities for writing, drawing, etc., was valued at £18,538, lined and coloured paper at £4,725, cigarette paper at £7,508, and blotting paper at £3,400.

During the first nine months of 1903 the value of imported paper was £41,648, as compared with £35,434 for the same period in 1902.

The value of the paper imported from Great Britain in 1902 is returned at £49, an increase of £23 compared with the previous year.

One of the most serious fires of recent years occurred in the City early Tuesday morning, and resulted in the complete destruction of a large portion of the Haydon-square goods depôt of the London and North-Western Railway Co. Amongst the goods handled at the depôt may be mentioned large quantities of paper in reels.

British Algin Co., Ltd., Liverpool.—Lien registered April 19th, for £4,500 five per cent. first mortgage debentures, part of £15,000; amount previously issued, £10,500; no trustees; charged on the undertaking and all the property, including goodwill, assets, rights, and uncalled capital.

Telegraphic Address: "APSLEY, LIVERPOOL." Telephone: 382.
MAKIN & BANCROFT, Codes { A B C, 4th Edition, Lieber's, Private.
Apsley Buildings, 4, Old Hall Street, Liverpool.
SOLE BRITISH AGENTS FOR THE SAULT STE. MARIE PULP & PAPER Co.,
ONTARIO, CANADA.
Direct Importers of All Papermakers' Materials.

DR. C. WURSTER'S PATENTED Pulping Engines & Kneaders NEARLY 80 AT WORK.
LARGE PATTERN—THREE SIZES.
PULPING-UP 3, 6, and 9 TONS of Dry Papers or Pulp in 24 hours.
Power:—5-h.p., 8-h.p., and 12-h.p. Prices:—£125, £150, and £200.
SMALLER PATTERN—For Clean Papers only.
PULPING-UP HALF-A-TON to ONE TON of Dry Paper in 24 hours. 2 to 4-h.p.
Built in Iron, £75, £90, and £100.
For Better Quality Papers, Trough and Propellers made of Brass:—£100, £125, & £150.
Special Machines for Unsorted Paper.
These Machines do not grind, cut up, or wet the fibres, and, as the state of beating and refining is unaltered, neither colour nor sizing being affected, and impurities not touched, "Broke" can be re-used for the same quality of paper again.
For Particulars apply to **Dr. C. WURSTER,** 29, Abbey Road. St. John's Wood. LONDON, N.W.

JAMES KENYON and SON,
DERBY STREET MILLS, BURY, LANCASHIRE.
ALL FELTS for Papermakers.
Telegrams: "KENYON, BURY."

Digitized by Google

MARKET REPORTS.

Telegrams—"STONEHILL, LONDON."

Chemicals.

There is not much movement in the chemical trade; in BLEACHING POWDER exports show an improvement. Prices remain steady, AMMONIA ALKALI, 58 per cent., being quoted £4 10s.; CAUSTIC SODA, 77 per cent., £10 10s.; BLEACHING POWDER, soft wood, £4 5s.; and SODA CRYSTALS, £3 to £3 2s. 6d. SALT CAKE stands at £1 15s. to £1 17s. 6d., and RECOVERED SULPHUR, from £5 5s. to £5 10s. ALUM and SULPHATE OF ALUMINA are unchanged, but HYPOSULPHITE OF SODA, CHLORIDE OF BARIUM, and SATIN WHITE are easier.

Chemical Wood Pulps.

The market is very firm, and manufacturers report a scarcity of easy-bleaching SULPHITES.

Mechanical Wood Pulps.

There is very little business reported. Consumers, who seem well covered, do not respond to the views of sellers in regard to prices.

Esparto.

Market demand quiet and limited, and buyers not disposed to operate extensively unless at lower prices.

The ESPARTO arrivals during last week were:—

Quantity	From	Importer	Port
230 tons	Almeria	Morris and Co.	Methil
1,194 bales	,,		Grangemouth
1,147 tons	Arzew	Robert Hay & Co.	Berness
1,135 bales	Oran		London
4,119 trusses	,,		Bristol
606 tons	Skyros		Glasgow

Home and Foreign Rags.

LONDON: The market is fairly active, especially for Cotton goods.—BRISTOL: Steady demand at unchanged prices.—MANCHESTER: All grades of stock are in request, and there are no accumulations.—EDINBURGH: A good business passing in most grades; prices firm.—DUBLIN: Fair enquiry.

The exports of PAPER STOCK from British ports during last week were: To Belgium, 95 tons; France, 204 tons; Germany, 143 tons; Holland, 113 tons; India, 24 tons; and the United States, 184 tons.

In FOREIGN RAGS the demand for French stock is well maintained. German packers state that all rags for papermakers are in fair demand and move well, especially Best White Linens, White Cottons, Light Prints, Grey and Blue Linens; the demand is well maintained for New Cuttings for the States at current prices; Jute Bagging, however, is without enquiry, and prices are easier. More movement is also reported in Dutch and Belgian Rags.

The arrivals of FOREIGN RAGS at British ports last week were:—From Belgium, 422 bales; Channel Islands, 21 bales; Denmark, 100 bales; France, 1,573 bales; Germany, 571 bales; Holland, 443 bales; Sweden, 329 bales; United States, 15 bales.

Minerals, etc.

A good demand continues for CHINA CLAY. MINERAL WHITE is steady, and a moderate enquiry is reported for FRENCH CHALK and BARYTES. SATINITE is in good request.

GAZETTE.

A WORD OF CAUTION.—In giving the official Gazette information, it must be distinctly understood that we take official records as we find them, and accept no responsibility for inaccuracies, while, as an almost invariable rule, the facts will be found correct. We advise our readers, before forming hasty judgment, to consider that there may be in each case a satisfactory explanation which does not appear on the record.—ED.

ENGLAND and WALES.

PARTNERSHIPS DISSOLVED.

HART, J., and CLARK, E. A., trading as Hart and Co., fine art printers, 3, Fulwood's-rents, Holborn, W.C. Debts by E. A. Clark, who will continue to carry on the business. April 16th.

BRIGGS, F. and H. W., trading as Briggs Bros., printers, bookbinders, and stationers, Keighley-road, Silsden, and Brick School, Barnoldswick, Yorks. Debts by F. Briggs, who will continue the business under the same style. March 31st.

DISTRIBUTION OF ASSETS.

WALLER, H., late of 18, Hatton-garden, E.C., colour printer. Claims by May 19th, to Wakeford, May and Waugh, 37, Bloomsbury-square, W.C., solicitors to the executors.

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDERS.

JONES AND STAINFORTH, 12 and 24, Garden-street, 30½, Brook street, and the Paragon Works, Church-street, Hull, printers and paper bag merchants. Date of order and of adjudication order, April 21st, made on debtors' own petition.

CHESTON, C. F., 4m, The Bridge, Taunton, and formerly of Wellington, Somerset, stationer. Date of order, April 23rd, made on a creditor's petition.

NOTICES OF INTENDED DIVIDENDS.

PASS, A. H., trading as the Redditch Needle Case and Card and Box Co., Prospect-hill, Redditch and Institute-road, Kings-heath, Worcestershire, cardboard box manufacturer. Claims by May 13th to L. J. Sharp, official receiver, 174, Corporation-street, Birmingham.

NOTICES OF DIVIDENDS.

DEVEREUX, H. S. T., Birdlip-house, Bath-road, Cheltenham, printer, bookbinder and publisher. First and final dividend of 16½d., April 25th, at the official receiver's office, Station-road, Gloucester.

METALS.—Under the date of Wednesday last, Messrs. I. and J. Hyman, metal merchants, Britannia-street, Kings-cross, quote (subject to market fluctuations) their prices for Old Scrap Metals:—

	Per Ton.
Clean Copper	£52 0 0
Tinned or Brassiery Copper	49 0 0
Gun Metal	47 0 0
Brass	32 10 0
Old Zinc	17 15 0
New Zinc Cuttings	19 15 0
Lead (subject to usual 4-lbs. per cwt. tare)	11 2 6
Hollow Pewter	92 0 0

Digitized by Google

Office of the WORLD'S PAPER TRADE REVIEW,
Telegrams: "STONHILL—LONDON." *58, Shoe Lane, London, E.C.*

CURRENT PRICES OF PAPERMAKING MATERIALS.

CHEMICALS.

Quotations are nominally as follows

Alkali, Ammonia, 58%	...	f.o.b. Liverpool	£4	10	0
,, ,, 48%	...	,, ,,	4	5	0
Alum (Ground), tierces	...	,, ,, 2½%	5	10	0
,, barrels	...	,, ,, 2½%	5	12	6
,, tierces	...	,, Hull 2½%	5	5	0
,, ,,	...	f.o.b. Glasgow 2½%	6	0	0
,, (Lump) barrels	...	f.o.b. Liverpool 2½%	5	0	0
,, tierces	...	,, ,, 2½%	4	17	6
,, barrels	...	,, Hull 2½%	4	17	6
Alum tierces	...	London 2½%	5	7	6
,, ,,	...	f.o.b. Glasgow 2½%	5	10	0
Alumina Sulphate Bags	...	f.o.b. Tyne net	3	10	0
Aluminoferric Cake, slabs	...	Liverpool	2	15	0
,, ,, tierces		,,	3	2	6
Alumina Cake, slabs	...	Glasgow	2	15	0
Blanc Fixe	...	f.o.b. Tyne net	5	15	0
Bleach	...	,, ,, net	4	7	6
,, (soft wood) ...	...	f.o.r. Lancs. net	4	7	6
,, (hard wood) ...	...	f.o.b. Liverpool net	5	0	0
,, (soft wood) ...	...	landed London net	4	15	0
Borax (crystals) ...	...	f.o.b. Liverpool net	13	0	0
,, (powdered) ...	...	... ...net	14	0	0
Caustic White, 76% ...	...	f.o.b. Liverpool net	10	10	0
,, ,, 74% ...	...	,, ,, net	10	5	0
,, ,, 70% ...	...	,, ,, net	9	15	0
,, ,, 70% ...	...	f.o.r. Lancs. net	9	12	6
,, ,, 60% ...	...	f.o.b. Liverpool net	8	15	0
Caustic Bottoms	...	f.o.r. Lancs. net	6	5	0
Chloride of Barium Casks		f.o.r. Hull net	6	0	0
Hypo-Sulphite of Soda	...	f.o.r. Tyne	5	0	0
,,	...	f.o.b. Tyne	5	5	0
Oxalic Acid	...	f.o.b. Liverp'l net	per lb		2½
Salt Cake	...	f.o.b., ,,	1	17	6
Satin White	...	f.o.b London	5	0	0
Soda Ash, Carbonated, 52%		f.o.b. Liverpool net	6	2	6
,, ,, 48% ...		,, ,, net	6	0	0
Soda Ash, Carbonated 52% ...		f.o.r. Widnes net	6	0	0
Soda Ash, Carbonated 48% ...		f.o.r. Widnes net	5	17	6
Soda Ash, Caustic, 48% ...		f.o.b. Liverpool	6	5	0
Soda Ash Caustic 52% ...		,, ,,	6	7	6
Sal Ammoniac (1sts)	...	f.o.b. Liverpool	42	0	0
,, (2nds)	...	,, ,,	40	0	0
Soda Crystals	...	f.o.b. Tyne net	3	2	6
,, ...	...	ex ship Thames 2½%	3	5	0
,, ...	...	f.o.b. Liverpool 5%	3	7	6
Sulphate of Ammonia ...	...	,,	12	6	3
Sulphate of Copper	...	,, Liverpool 5%	21	0	0
Sulphur, rolls	...	f.a.s. works net	6	7	6
,, flowers	...	,, ,, ,,	7	10	0
,, recovered	...	,, ,, ,,	5	10	0

FOREIGN CHEMICALS.

F.o.b. Continental Ports:

Bleaching Powder, 35%-37% casks		f.o.b. Antwerp	4	5	0
Hypo-Sulphite of Soda, casks		f.o.b. Rotterdam nett	4	15	0
White Sugar of Lead, casks		f.o.b. Hamburg ...	24	10	0
Sulphate of Alumina, 14%-15% casks		f.o.b. ...	3	7	6
Zinc Oxide		f.o.b. less 2½%	52	0	0

STRAW PULPS.

Prices, c.i.f. English and Scotch Ports.

German, dry, No. 1			£13	0	0
,, ,, No. 2			12	0	0
Dutch			11	0	0

CHEMICAL WOOD PULPS.

GREAT BRITAIN.

Prices, c.i.f. London, Manchester, Granton, etc.

Sulphite, Bleached			£11	10	0—12 0 0
,, Unbleached, 1st quality ...			8	15	0— 9 0 0
,, ,, Ordinary ...			8	5	0— 8 15 0
,, ,, 2nd quality ...			7	15	0— 8 0 0
Soda, ,, ... 1st quality ...			7	10	0— 7 15 0
,, ,, ... 2nd ,, ...			7	0	0— 7 5 0

FRANCE.

C.i.f. Rouen per 100 kilos. (2 cwt.).

Sulphite, Unbleached, 1st quality ...	Frs. 22–23
,, Ordinary	20–21
,, ,, 2nd quality ...	18–20
,, Bleached, Superior	30–32
,, ,, Inferior	28–29
Soda and Sulphate, Unbleached ...	19–20
,, ,, 2nd quality ...	18–19

UNITED STATES.

Sulphite, American, Bleached	2.40c— 2.50
,, ,, Unbleached ...	1.85 — 2.10
,, Foreign, Bleached	3 — 3.30
,, ,, Unbleached	1.95c— 2.15c
Soda, American, Bleached	2.12c— —
Soda, American Unbleached	2.50c— 2.6cc
,, Foreign Bleached	2.55 — 2.85
,, ,, Unbleached	1.80 — 1.90

MECHANICAL WOOD FULFS.

GREAT BRITAIN.

Prices, c.i.f. London, Manchester, Preston, Granton, etc.:

Pine, 50% moist, prompt delivery ...			£2	2	6
,, ,, forward delivery ...			2	5	0
,, dry, prompt delivery ...	4	5	0—4	10	0
,, ,, forward delivery ...	4	15	c—5	0	0

FRANCE.

Prices c.i.f. Rouen, per 100 kilos. (2 cwt.).

Pine, 50% moisture	Frs. 11 —11.50
,, dry	11.50—12
Aspen ,, fine, dry	15.50—16.50
Brown (half-chemical), 50% moisture ...	10.50—12
,, ,, dry	11 —11.50

UNITED STATES.

F.o.b. Mill, nearest port (per 2,000 lbs.) ... ... 15 dollars

ESPARTO.

Prices ex-ship London, or f.o.r. Leith, Granton, Garston and Tyne Docks, are nominally as follows:—

Spanish—Fair to Good			£4	7	6—4 12 6
Fine to Best			5	2	6—5 7 6
Oran— Fair to Good			3	3	9—3 6 3
First Quality			3	8	9—3 12 6
Tripoli— Hand-Picked			3	8	9—3 10 0
Fair Average			3	3	9—3 5 0
Bone and Philippeville			3	10	0—3 12 6
Slax and Gabes			3	8	9—3 10 0

ESPARTO PULP.

Prices, c.i.f. Rouen, per 100 kilos (2 cwt.).

First quality	Frs. 42. —43.
Second quality	40. —41.

Digitized by Google

FOREIGN RAGS.

FRENCH.

Quotations f.o.b. Rouen

Extra Linens	—	Blue Linen, No. 1 ...	8/0
White Linens, No. 1 ...	22/0	Fustians	4/0
,, No. 2 ...	17/0	Old Bagging (solid) ...	2/9
,, No. 3 ...	14/0	,, (common)	1/0
,, No. 4 ...	8/0	Hemp, tarred in coils	11/0
,, No. 5 ...	4/6	Hemp strings	10/0
Gray Linens (strong)	13/0	NEW CUTTINGS.	
,, (extra) ...	18/0	White Linen, ...	33/0
White Cotton, No. 1 ...	13/0	Unbleached Linen ...	30/0
,, No. 2 ...	9/0	Gray Linen	23/0
,, No. 3 ...	7/6	Extra White Cotton...	19/0
,, No. 4 ...	6/0	Ordinary ,, ...	18/0
,, No. 5 ...	3/0	Curtain Cuttings ...	17/0
White Knitted ...	17/0	Stay ,, ...	15/0
Muslins	6/0	Extra Light Prints ...	13/0
Extra Light Prints ...	8/0	Unbleached Cotton ...	21/0
Light Prints	4/0	Oxford	12/0
Dark Prints	1/6	Flanellettes	15/0
Blue Cotton, No. 1 ...	5/6	Blue Cotton	10/0

GERMAN.

Quotations are as follows

NWC	19/0	Dark Cottons	2/10
SPFFF	20/0	Grey Linens I. ...	11/10
SPFFF and SPFF ...	18/0	,, II.... ...	7/0
SPFF	15/0	CSPFFF	13/10
SPF	12/0	CSPFF	9/10
Light Prints	7/0	CSPF	7/5
Fustians	3/10	Dark Blues (selected)	7/0
Mixed Coloured Cottons	3/10	Jute, No. I.	3/0
		,, No. II.	1/0

PRUSSIAN.

C.i.f. London, Hull, or Leith.

SPFF	13/6	CC (cotton)	3/0
SPF	9/0	Jute I	2/3
FG	8/0	,, II	1/6
LFB	6/3	Rope I	7/3
FF	3/0	,, II	4/3

BELGIAN.

Quotations, f.o.b. Ghent.

White Linens, No. 1	21/0	House Cloths... ...	2/6
,, ,, No. 2	16/0	Old Bagging (solid) ...	3/0
,, ,, No. 3	12/0	,, ,, (common)	2/6
Fines (Mixed)	12/0	NEW.	
Grey Linens (strong)	9/6	White & Cream Linens	5/0
,, (extra)	14/0	White Cuttings ...	22/0
Blue Linens	8/0	Unbleached Cuttings	21/0
White Cottons No. 1 ...	18/0	Print Cuttings ...	8/0
,, No. 2 ...	15/0	FLAX AND HEMP WASTE.	
Outshots No. 3... ...	10/0	Flax Waste, washed	
Seconds No. 4	7/9	and dri	10/0
Prints (Light)	7/0	Fair	8/0
Fustians (Light) ...	3/6	Flax Card Waste ...	6/0
Fustians (Dark) ...	2/0	Hemp Waste, No. 1...	8/0
Black Cottons ...	3/0	,, ,, No. 2...	3/0
Hemp Strings (unt'r'd)	2/3		

DUTCH.

F.o.r. English ports.

Whites, No. 1	14/9	W. Manilla Rope (coils)	7/3
,, No. 2... ...	9/9	do. Tarred ,, ...	4/9
,, No. 3... ...	6/6	Canvas No. 1	14/0
Grey Linens	8/6	,, No. 2	10/0
Clean House Cloth ...	3/0	,, No. 3	6/0
Mixed Fustians ...	4/9	W. Untarred Rope ...	10/0
Coloured Prints ...	2/7½	Paper Shavings ...	
Dark Prints	2/1½	Free from wood ...	7/0
Blue Cottons	5/6	Mixed Bagging ...	2/7½
Light Lilac Cottons	7/0	Bright New Gunny...	3/6
Muslins	9/9	New Bleached Cuttings...	17/6
Mixed Hemp Rope Coils...	8/3	Unbleached Cuttings	16/6
Broken (in bags) ...	6/0		

NORWEGIAN.

C.i.f. London, Hull, Tyne, and Grangemouth.

1st Rope (tarred)	8/3-9/6	2nd Canvas	7/6
2nd ,, ...	5/0-5/9	Jute Bagging	
Manilla Rope (white)	10/6-11/0	Gunny	3/0-3/3
Best Canvas ...	11/9-12/0	Mixed	2/0-2/6

TURKISH.

F.o.b. Constantinople (per 100 kilos)

Whites, 1st ...	Francs 10	Ropes, Thick ...	Francs 10
,, 2nd ...	,, 5	,, Medium	,, 12
Coloured ...	,,	,, Thin	,, 15

STRAW.

Oat, ex steamer Thames	...	...	...	£1	7 6
Wheat ,, ,,	...	...	...	2	2 0

HOME RAGS.

LONDON.

N. White Cuttings	21/6-26/0	Canvas No. 1 ...	14/0-15
Fines (selected) ...	19/6-21/0	,, No. 2 ...	9/6-11
,, (good London) ...	17/0-17/6	,, ,, 3 ...	5
Outshots (selected)	10/0-13/0	Mixed Rope ...	2/9-
,, (ordinary)	8/0-9/0	White Rope ...	4/0-
London Seconds	1/6-1/9	White Manilla Rope	8/0-
Country ,,	3/0-7/0	Coil Rope	
London Thirds ...	0/9-1/3	Bagging	1/3-
Country ,, ...	2/0	Gunny	2/0-

BRISTOL.

Fines	17/6	Clean Canvas ...	1
Outshots	9/0	Second ,, ...	
Seconds	5/0	Light Prints ...	
Thirds	2/6	Hemp Coil Rope	
Mixed Bagging ...	2/6	Tarred Manilla ...	

MANCHESTER.

Fines	14/0-15/0	Blues	3/6-
Outshots (best) ...	8/6-9/6	Bagging	2/3-
,, (ordinary)	7/6-8/0	,, (common)	1/6-
Seconds	4/0-4/6	W. Manilla Rope	9/0-10
Thirds	2/0-2/3	Surat Tares ...	2/9-3

EDINBURGH.

Superfines	15/0	W. Manilla Rope	9/6-10
Outshots	12/0	Tarred Manilla Rope	6
Mixed Fines ...	14/0	,, Hemp Rope	8
Common Seconds	8/0	Rope Ends (new)	5
First ,,	11/0	,, ,, (old)	3
Prints	6/0	Bagging	2/0-2
Canvas (best)	14/0	,, (clean) ...	3/0-4
,, 2nd ...	9/0		
Black Cottons ...	2/0		

GLASGOW.

Fines	12/6-16/0	Canvas No. 1 ...	15
Blues	4/6	,, No. 2 ...	10
Common Blues ...	3/3	Manilla Rope ...	8
Bagging	4/0	Tarred Hemp ...	9

DUBLIN.

White Cuttings ...	16/0	Mill Bagging ...	2
Fines	9/0	White Manilla ...	8
Seconds	4/6	Tarred Hemp ...	6
Light Prints ...	1/6	Rigging	10
Black ,, ...	1/0		

JUTE.

Good White	...	...	...	£17	0	0	— 19	0
Good	...	...	...	14	10	0	— 16	10
Medium	...	...	...	12	0	0	— 13	0
Common	...	...	...	11	0	0	— 12	0
Rejections	...	...	...	9	10	0	— 10	0
Cuttings	...	...	...	5	0	0	— 8	0

WASTE PAPERS.

Cream Shavings ...	9/0	Small Letters... ...	3/
Fine ,, ...	8/0	Large ,, ...	5/
Mixed ,, ...	4/3	Brown Paper	2/
White Printings ...	7/9	Light Browns	3/
White Waste	3/0	Dark ,, ...	2/
Wood Pulp Cuttings	3/3	Books & Pamphlets	3/
Blue Paper	2/0	Strawboard Cuttings	1/
Crushed News ...	3/0	Jacquards ,, ...	2/

Per Export 25s. per ton extra.

BALING TWINE.

Hemp ...	4¾d. per lb.	5d. per lb	5¼d. per lb.
Mixed ...	4¼d. ,,	4¾d. ,,	5d. ,,

STARCH.

F.o.r. London, less 2½%

Maize— Crisp	£10	15	0
Pearl	10	10	0
Powder	11	0	0
Special	11	10	0
Farina— Prime...	10	10	0
E.K.M.F.	14	0	0
Delivered :			
Rice— Special (in chests) ... ... net	19	10	0
Crystal (in bags) ... ... less 2½%	18	10	0
Granulated in bags) ... ,,	17	10	0
Waste... ... ... ,,	13	0	0
Dextrine—	14	0	0

ROSIN.

Quotations (ex-wharf less 2½% discount) are as under :—

B/C	D	E	F	G	I	K	M	N	WG	WW
7/6	7/7½	7/9	8/0	8/1½	8/6	9/0	11/6	11/9	11/6	12/6

Digitized by Google

SIZING.

Prices are nominally as under :—

English Gelatine	Per cwt.	£3 0	0—4 10	0
Foreign ,, ...	,,	3 0	0—4 10	0
Fine Scotch Glues	,,	2 6	0—2 10	0
Best Long Scotch Glues ...	,,	1 10	0—2 0	0
Common Black	,,	1 13	0—2 0	0
"Town" Glues	,,	1 0	0—1 5	0
"Bone" Glues	,,	1 5	0—1 10	0
Foreign Glues	,,	1 0	0—1 5	0
Bone Size	,,		5 0— 8	0
Gelatine Size	,,		6 6— 10	0
Dry B.A. Pieces	,,	2 5	0—2 10	0
,, English Pieces	,,	1 10	0—2 0	0
Wet ,, ,, ...	,,		8 6— 9	
,, Sheep Pieces	,,		3 0— 4	0
Buffalo Hide Shavings ...	,,	1 10	0—2 8	0
,, Picker Waste ...	,,	1 12	0—1 16	0

COLOURS.

Nominal Prices.

Mineral Black	Per Ton	£3 10	0
Black Peerless	,,	50 0	0
Ochre (English and Irish)	,,	*3 15	0
Ochre (French)	,,	*4 0	0
Pure Crawshay Turkey Red ...	,,	22 0	0
Red Oxide and Venetian Red ...	,,	*4 0	0
Umber (Derbyshire)	,,	*4 0	0
,, (Irish)	,,	2 0	0
Chrome (Pure)	Per Cwt.	2 10	0
Yellow (Imperial)	,,	0 14	0
,, (Bordeaux)	,,	0 12	6

* Higher Prices according to strength and shade.

PASTE COLOURS, with 40% of Colour (less 2½% d/d.)

Orange Pulp...	Per Cwt.	2 10	0
Golden Yellow Pulp	,,	1 16	0
Lemon Yellow Pulp	,,	1 16	0
Prussian Yellow	,,	1 16	0
Green (free from Arsenic)	,,	1 16	0
Paste Blue, 20%	,,	0 18	0
,, 33%	,,	1 4	0
,, 40%	,,	1 8	0

LIME.

Per ton, f.o.r. works 10/-

LOADINGS, etc.

China Clay, in bulk, f.o.b. Cornwall, 8s. 6d. to £1 5s. 6d. (highest grade) per ton, bags 5s., and casks 9s. per ton extra; delivered Lancashire, £2 (for best papers), and commoner qualities 22/ to 36/ per ton.; best f.o.r. London, in casks, £2 7s. 0d. per ton; f.o.b Liverpool, in 5 cwt. casks, £2 to £2 5s. 0d. for export.

French Chalk, W.E., W.O., and other brands, £2 17s. 6d. to £4 8s. 0d. per ton, according to quality, delivered in most Yorkshire and Lancashire towns, also f.o.b. Glasgow, Belfast and London.

Italian Chalk, finest brands—f.o.b. Manchester, Liverpool, or London—I.W.A., "Portland Mills," and "Swan" marks, £4 to £5 per ton of 10 bags.

Agalite, in bags, c.i.f. U.K. ports, £3 to £3 10s. per ton.

Paper Makers' Plaster, 14/ per ton and upwards delivered.

Superfine Hardening, delivered Mills, 50/ per ton and upwards.

Patent Hardening (2 ton lots), f.o.r. Lancs., £2 19s. 6d.

Mineral White (also known as Terra Alba, and Sulphate of Lime), per ton f.o.r. or boat at makers works :—

Superfine, best picked white, finely ground	18/ — 28/
Superfine, second quality	
Pottery, best quality	
Pottery, No. 2 quality	

Gypsum

Light Pink	6/6 — 16/
Seconds	
Brown	
Thirds, selected	

Terra Alba and Gypsum delivered any Lancashire or Yorkshire station about 10/ per ton extra, except Manchester, which is only 8/ per ton extra. Delivered London stations about 7/ per ton extra.

Bauxite, minimum alumina, 60%, 17s. f.o.b.

Sulphate of Alumina, £3 15s. 0d. to £4 12s. 6d. per ton delivered to Mills.

Sulphate of Barytes, No. 1, £3 4s. 0d.; No. 2, £2 12s. 6d No. 3, £2 2s. 0d.; No. 4, £1 15s. 0d. per ton, less 2½%.

Magnesite (containing 98% Carbonate of Magnesia), raw ground, £4 10s. 0d.; calcined, £8 10s 0d.

Magnesite (in lump), £1 19s. 6d. per ton.

Satinite, £3 4s. 6d., in casks, f.o.b. Liverpool or Manchester.

Chloride of Zinc, £6 18s. 6d. per ton.

Books for Papermakers.

—o—

"ART OF PAPERMAKING," by ALEXANDER WATT. A practical handbook on the manufacture of paper, etc. 7s. 6d.

"CELLULOSE," by CROSS and BEVAN. An outline of the chemistry of the structural elements of plants. 12s.

"CELLULOSE, RESEARCHES ON," by CROSS and BEVAN. 6s.

"DYEING OF PAPER PULP," by JULIUS ERFURT. Translated into English by JULIUS HUBNER. A practical treatise for the use of papermakers and others. German edition, 12s. 6d. English edition, 15s.; Posted abroad, 20s.

"DIRECTORY OF PAPERMILLS, 1904." A list of the papermills in the United Kingdom, also of London wholesale stationers and the paper stainers of Great Britain. 2s. 6d.

"DIRECTORY OF FRENCH AND FOREIGN PAPER & BOARD MANUFACTURERS," 1903. This directory (in French) contains a list of papermakers, paper merchants, booksellers, etc., and articles on technical subjects. 9s. 3d.

"FACTORY BOOKKEEPING FOR PAPER-MILLS," by JOSEPH MACNAUGHTON. A system devised to meet practical requirements. 10s.

"NORDISK PAPPERS KALENDER, 1902." Scandinavian pulp and paper trade Directory. 4s.

"PRACTICAL PAPERMAKING," by GEORGE CLAPPERTON. A manual for papermakers and owners and managers of papermills. 5s.

"PAPERMAKERS' POCKET-BOOK," by JAMES BEVERIDGE. Concise information relating to engineering, chemical, and office and papermaking departments of the mill. 10s.

"PAPERMAKING," by CROSS and BEVAN. A text book of principles, presenting the subject to the reader according to its scientific perspective. Second edition, 12s. 6d.

"PRACTICAL TESTING OF RAW MATERIALS," by S. S. DYSON. 12s. 6d.

"SAMPLING OF WOOD PULP," by R. W. SINDALL. Methods of sampling for moisture tests. 2s.

"STAMPELBOK," by K. VON HOFSTEN. Book of the trademarks of the chemical and mechanical wood pulp mills in Sweden and Norway, in the English language. Edition for 1902. 21s.

"TABLES OF WEIGHT OF PAPERS" for ascertaining the weight of paper in grammes per square metre from different sizes of Paper in reams of 480 and 500 sheets; in English, French, and German. 2s. 6d.

"BULLETIN JOURNAL DES FABRICANTS DE PAPIER," a bi-monthly French paper trade journal. Annual subscription, £1 4s., including postage. A good Continental advertising medium, rates on application to the Sole British Agents as under.

—o—

Any of the above may be obtained, post free, on remittance with order to

W. JOHN STONHILL & CO.,
58, SHOE LANE, LONDON, E.C.

Digitized by Google

GERMANY.

For some time past there has been considerable friction between papermakers and paper consumers in Germany in putting forward their respective interests in regard to the tariff. An understanding, however, has now been arrived at, and as the Paper Consumers' Association is in possession of all the necessary material the voice of the trade in connection with the preparation of commercial treaties will be left to that body.

An amalgamation has taken place of the Charlottenburg Mechanical and Technical Testing Office and the Royal Chemical and Technical Testing Office of the Berlin-Berg academie under the name of the Material Prufungs Amt der Technischen Hochschule, Berlin. New and extensive premises have been occupied in Gross-Lichterfelde West.

AUSTRO-HUNGARY.

Mr. J. M. Voith, papermakers' engineer, of Heidenheim, has opened a branch establishment at St. Polten, Austria.

A new board machine was recently started up by the Graflich Lambertsche Holzstoff und Pappen Fabrik, Remmingstein, a/M. It was guaranteed to produce 10,000 kilos. a day, but according to report it turned out 14,000 kilos. on the first day of working.

Messrs. GANZ AND Co., engineers, of Buda Pesth, announce a dividend of 17½ per cent. as against 12½ per cent. in the previous year.

UNITED STATES.

Messrs. McEWAN Bros., of Whippany, New York, are, it is reported, about to erect mills to make boards under the McEwan patent. It is stated that four machines have already been ordered. Mr. Robt. McEwan will shortly resign his position as president of the National News Board Co., the owners of the McEwan patent. There is some question as to obtaining a license from the National News Board Co., but it was understood that when the McEwans sold their controlling interest in the National News Board Co. to the United Box Board and Paper Co. they reserved the right to make a portion of new board per day free of the payment of any licence. In addition to this they also reserved the right to put in the manufacture of news boards which do not come within the Canadian and European market on board made under the McEwan patents.

The Bird Paper Co. The report issued by the company for the year ended January 31st, 1904, shows a profit was made of 952,685 dols., of which 770,000 dols were distributed in dividends, and for the year ended January 31st, 1904, the profits were 774,484 dols., of which 770,000 dols. were also distributed in dividends. A reduction in profits is therefore shown of 178,201 dols. The capital of the company is 27,000,000 dols.

Mr. Solomon R. Wagg.—Under the heading of "American Mill Superintendents," the *Paper Trade Journal*, of New York, publishes some interesting particulars of the career of Mr. Solomon R. Wagg, secretary and superintendent of the Fox River Paper Co., of Appleton, Wis. Mr. Wagg is the patentee of numerous inventions. In 1887 he invented a lining for sulphite digesters which so many men have struggled with, but the excellence of his lining is attested by the fact that it is running successfully, and has been doing so for twelve years. Mr. Wagg's most important invention is the "Duplex" bar and the "Majestic" Jordan and a half-dozen or more patented improvements thereon. The duplex or triplex bar in the "Majestic" Jordan, co-acting with the duplex beater, has actually cut the time of beating from six hours to one hour, the beater delivering long stock well drawn out to the "Majestic" Jordan, and obtaining in the paper an increased tensile strength of from 10 to 25 per cent. by actual test. The Fox River Paper Company's mills have been doing this for several years, and obtaining a stronger, smoother, tougher, better folding sheet than it is claimed is possible by the use of any single bar and common Jordan, and at a saving of time, power, and money. A recent invention along this line, not yet offered to the trade, made by Mr. Wagg, is a system of re-refining, and consists of returning 30, 40, or 50 per cent. of stock from the discharge end of the Jordan to the inlet, where it is reground. This process has been used in the "Lincoln" mill for the past four months. It produces a smoother, better formed sheet, and, somewhat to Mr. Wagg's surprise, a stronger sheet. Samples of bond paper, which are hardest for printers and lithographers to handle, made by this process were submitted to a well-known printer for the purpose of making comparisons with the same qualities of paper previously made at the mill, as well as with five Eastern makes of bond, and Wagg's re-refined stock took precedence over all of them for exquisite printing qualities. The same results would be obtained in book and news paper. It has been demonstrated that the re-refining process will make fibres of from five to seven different lengths in a sheet, forming the most perfect surface possible for printing. The E. D. Jones and Sons Company, Pittsfield, Mass., is the agent for the re-refining process.

The International Brotherhood of Papermakers will hold a meeting at Niagara Falls, N.Y., on May 9th, when the "three-tour system" will be discussed. Several local unions have instructed their delegates to favour a demand for the eight-hour shift.

ADVERTISE in this paper! It pays!

Digitized by Google

BUSINESS CARDS.

Rates for Weekly Insertions of announcements of this character may be obtained on application to W. JOHN STONHILL & CO., 58, Shoe Lane, London, E.C.

JEAN FREESE,
Dealer, Importer, Agent.
China Clay,
Paper Stocks,
Sulphite Pulps,
Bleaching Powder.
310, Vanderbilt Building,
132, Nassau Street,
NEW YORK CITY.

☞ Correspondence Solicited. ☜

BFV BLEACHED SULPHATE,
Kommanditbolaget C. Fr. Wærn & Co.,
GOTHENBURG.

CORNBROOK CHEMICAL Co.,
STOCKPORT LIMITED,
(Successors to ROBERTS DALE & Co., Manchester & Warrington
DRY & PULP COLOUR MANUFACTURERS
For the PAPER TRADE.
Paste Blues, Chromes, etc.
Any sample matched. Enquiries solicited.

C. D. EKMAN,
GRAVESEND,
Chemical Engineer,
SULPHITE PULP and
PAPER TRADE EXPERT.
SCANDINAVIAN BUSINESS A SPECIALITY.

Telegraphic Address:—"RELIABLE." National Telephone, 1977.
J. BEAUMONT & CO.,
Wholesale Rag & Paper Stock
MERCHANTS.
ALL GRADES OF COTTON RAGS, NEW RAGS, BAGGING, Etc.
Pump St., Oldham Road, MANCHESTER.

R. W. SINDALL, F.C.S.,
15, Borough High St., London, S.E.
ANALYST and CHEMICAL ENGINEER.
WOOD PULP and PAPER TRADE EXPERT.
THE EXAMINATION OF PAPERS A SPECIALITY.

JOHN CALDWELL & SONS, Nat. Tel. 390. T. A.: "Fents."
SUN MILLS, ANCOATS, MANCHESTER,
Wholesale Rag and Paper Stock
MERCHANTS.
Buyers of Shirt Cuttings, Underclothing Cuttings, Tailors' Cuttings; also all grades of New Rag Cuttings Warehouse Print Tabs, Fents, Twines, &c.
Terms—CASH. Bankers—L. & Y. Bank Shudehill.

R. & J. GOODHIND, Templar Street, LEEDS,
WHOLESALE
Rag and Paper Stock Merchants.
ALL KINDS OF COTTON & WOOLLEN RAGS, NEW RAGS, BAGGING, &c.
Large Quantities of Clean Unread Newspapers always in Stock. TELEPHONE 797.

WATER SUPPLIES
NORTON'S PATENT
Abyssinian and Artesian Tube Wells.
LE GRAND & SUTCLIFF,
Hydraulic Engineers,
Magdala Works, Bunhill Row, London

IMPORTANT TO STEAM USERS.
Boiler Composition
For Removal of Scale in Steam Boilers.
MANUFACTURED BY
JAMES EMMETT, Ltd., Reuben Street, LEEDS.

Wilh. MUNDS,
DRESDEN, SAXONY.
REPRESENTATIVE for 15 FACTORIES
CENTRAL OFFICE for the SALE of
Sulphite, Sulphate, Soda
& STRAW PULPS,
Bleached and Unbleached,
All Qualities and all Processes.

Digitized by Google

BRITISH IMPORTS of CHEMICAL and MECHANICAL WOOD PULP

For the Week Ended April 16th, 1904.

SPECIALLY COMPILED FOR THE BRITISH WOOD PULP ASSOCIATION.

CHEMICAL—DRY.

Date.	Ports.	Vessel.	Port whence.	Packages.	Quantity.	Value.	Importer.
1904.					Tons.	£	
April 13	London ...	Lar ...	Wyborg ...	240 bales	41	205	Andrews & Co.
" 13	" ...	Rimma ...	Sarpsborg ...	163 "	28	143	F. E. Baldwin & Co.
" 14	" ...	" ...	" ...	112 "	21	101	C. Shaw, Lowe & Sons
" 14	" ...	" ...	" ...	203 "	35	180	Thames Plank Ing & Lighterage Co.
" 15	" ...	Lena ...	Königsberg ...	254 "	41	208	Becker & Co.
" 15	" ...	Ina ...	Arendal ...	285 "	56	441	W. E. Hume
" 15	" ...	Ingvart ...	Christiania ...	81 "	1	10	Andrews & Co.
" 15	" ...	Ina ...	Arendal ...	21 "	17	146	J. Harman
" 16	" ...	Thale ...	Gothenburg ...	250 "	50	425	Tough & Bonbernard
" 16	" ...	" ...	" ...	226 "	46	388	Laing & Co.
" 16	" ...	Port of Cork ...	Hull ...	40 "	4	34	Canada Timber Estate and Wood Pulp Co.
" 16	" ...	Kingston ...	Lysekil Kanal ...	408 "	100	480	Becker & Co.
" 16	" ...	James ...	Drammen ...	200 "	74	1 [illegible]	Jamieson, Jorgensen & Wilson
" 17	Grimsby ...	Minnie ...	Gothenburg ...	1 [illegible]	28	242	T. Wilson, Sons & Co.
" 17	Hull ...	Clan Ross ...	" ...	71 "	12	105	Becker & Co.
" 18	" ...	" ...	" ...	271 "	70	210	Bonnerman, Craig & Co.
" 18	" ...	" ...	" ...	141 "	30	271	T. Wilson, Sons & Co.
" 18	" ...	Minnetonka ...	Christiania ...	112 "	21	208	" "
" 19	Manchester ...	England ...	Gothenburg ...	691 "	76	480	W. G. Taylor & Co.
" 19	" ...	" ...	" ...	42 "	4	40	E. Lacy & Hulme
" 21	" ...	" ...	" ...	1,0[illegible] "	180	1,[illegible]96	T. Nevin & Son
" 22	Newcastle ...	Kari [illegible] ...	Hugo ...	71 "	12	226	Firwood Iron
" 24	Preston ...	Rhea ...	Kragero ...	1,[illegible]05 "	232	1,[illegible]92	F. E. Ward
" 27	Queenboro' ...	Sona ...	Fredrikstad ...	1,[illegible]08 "	248	1,[illegible]38	T. Cowie, Ltd.
" 21	South Shields ...	Sterling ...	Christiania ...	200 "	35	280	J. B. Matthewman & Co.
" 22	" ...	" ...	Drammen ...	220 "	41	327	" "
" 24	Aberdeen ...	Crescent ...	Hamburg ...	80 "	21	158	R. Cummin & Co.
" 22	" ...	Lord Clive ...	" ...	142 "	31	242	" "
" 23	Dundee ...	J. C. Johnstone ...	Leith ...	15 "	25	250	J. Wilson
" 23	Glasgow ...	Thalaba ...	Gothenburg ...	1[illegible] "	28	240	Bonnerman, Craig & Co.
" 23	Grangemouth ...	Ina ...	Christiania ...	41 "	11	96	J. T. Stevenson & Co.
" 21	" ...	Jeanne d'Arc ...	" ...	192 "	112	827	" "
" 21	" ...	Norway ...	Drammen ...	400 "	110	740	W. G. Taylor & Co.
" 26	" ...	" ...	" ...	1[illegible] "	21	200	J. T. Stevenson & Co.
" 22	Leith ...	Sterin ...	Kongsberg ...	18 "	4	30	J. Currie & Co.
" 24	" ...	Masonic ...	Christiania ...	240 "	41	320	G. Gibson & Co.
" 24	Methil ...	Blue Bell ...	Ystad ...	2[illegible] "	4	40	G. Bruce & Sons
" "	Granton ...	Clan Stewart ...	Gothenburg ...	200 "	12	101	J. T. Stevenson & Co.

CHEMICAL—WET.

Date.	Ports.	Vessel.	Port whence.	Packages.	Quantity.	Value.	Importer.
1904.					Tons.	£	
April 12	London ...	Lar ...	Wyborg ...	271 bales	41	205	Andrews & Co.
" 22	Manchester ...	Skern ...	Skien ...	1,[illegible]00 "	288	1,[illegible]80	G. W. Taylor & Co.
" 24	Kirkcaldy ...	Minnie ...	Gothenburg ...	1,[illegible]00 "	120	1,[illegible]01	Bonnerman, Craig & Co.

MECHANICAL—DRY.

Date.	Ports.	Vessel.	Port whence.	Packages.	Quantity.	Value.	Importer.
1904.					Tons.	£	
April 13	Manchester ...	England ...	Gothenburg ...	200 bales	30	221	G. Simpson & Co.
" 18	" ...	Acacia ...	Christiania ...	120 "	22	208	Becker & Co.

MECHANICAL—WET.

Date.	Ports.	Vessel.	Port whence.	Packages.	Quantity.	Value.	Importer.
1904.					Tons.	£	
April 8	London ...	Lamer ...	Drammen ...	750 bales	71	40	J. E. Ibert & Co.
" 18	" ...	Kingston ...	Fredrikstad ...	1,[illegible]00 "	200	750	London Paper Mills
" 18	" ...	" ...	" ...	1,[illegible]50 "	212	780	Becker & Co.
" 22	Cardiff ...	Lyra ...	Drammen and Fredrikstad	1,[illegible]00 "	1[illegible]0	1,[illegible]00	T. Cowie & Co.
" 15	" ...	Lowana ...	Skien ...	1,[illegible]10 "	1[illegible]0	1,[illegible]82	"
" 16	Goole ...	Spring ...	Drammen and Fredrikstad	1,[illegible]50 "	220	1,[illegible]02	Becker & Co.
March 31	Manchester ...	Lagerton ...	Drammen ...	800 "	110	550	T. T. Stevenson & Co.
April 1	" ...	Orelia ...	Christiania ...	1,[illegible]00 "	150	120	Andrews & Co.
" 1	" ...	Skern ...	Skien ...	1,[illegible]00 "	110	512	E. Nevatal & Son
" 1	" ...	Orelia ...	" ...	1,[illegible]50 "	1[illegible]	1[illegible]	W. E. Ingram
" 1	" ...	Skern ...	Kragero ...	1,[illegible]00 "	1[illegible]	1[illegible]	T. B. Wood
" 1	" ...	" ...	Skien ...	1,[illegible]00 "	1[illegible]	1[illegible]	G. W. Taylor & Co.
" 1	Preston ...	Blake ...	Kragero ...	1,[illegible]00 "	1[illegible]	1[illegible]	T. B. Wood
" 1	" ...	" ...	Skien ...	1,[illegible]00 "	1[illegible]	1[illegible]	Star Paper Mill Co.
" 1	Queenboro' ...	Sona ...	Fredrikstad ...	1,[illegible]00 "	1[illegible]	1[illegible]	T. Cowie, Ltd.
" 1	Hayle ...	Hayle ...	Drammen ...	1,[illegible]50 "	1[illegible]	1,[illegible]77	Hayle Paper Works
" 1	Grangemouth ...	Jeanne d'Arc ...	Christiania ...	1[illegible]0 "	1[illegible]	1[illegible]	J. T. Stevenson & Co.

Digitized by Google

DIRECTORY.

Names and Addresses under these Headings will be charged for at the rate of 50/- per annum (52 insertions) for each card of two lines or under. Each additional line £1 per annum extra. Fresh headings are inserted when necessary.

ABYSSINIAN TUBE WELLS.

LE GRAND & SUTCLIFF, 125, Bunhill Row, London, E.C. . . . . Artesian Well Engineers.

ANALYSTS.

HURST, GEORGE H., F.C.S., 22, Blackfriars Street, Manchester. Speciality—Wood Pulp Sampling.

ARTESIAN WELLS.

ABUNDANT WATER SUPPLIES Co., apply to C. Isler and Co., Bear Lane, Southwark, S.E

ISLER, C. & Co., Bear Lane, Southwark, London, S.E.

CHINA CLAY.

BEST (JAMES) & SONS, Stoke-on-Trent. Specially Prepared China Clay for Papermakers. Stocks at Runcorn and Preston. Mines—Cornwall.

BODELVA & LANTERN CHINA CLAY Works. Stocks at Runcorn. Address J. Fletcher Pag[illegible] 8a, Rumford Place, Liverpool. 78[illegible]

CHINA CLAY Co., 4, St. Ann's Square, Manchester. Mines: St. Austell, Cornwall. Stocks: Manchester, Preston, Runcorn, Leith. 8855

ROGERS, J. & Co., Truro, Cornwall.— Agents, W. G. Taylor and Co., Ltd., 83, Queen Victoria Street, London, E.C., and 29, St. Andrew's Square, Edinburgh.

W. SINGLETON BIRCH & SONS, Ltd., 15, Upton Street, Manchester. Mines: Rosevear, St. Austel., Cornwall.

COLOURS.

CARDWELL, J. L. & Co., Cromwell Buildings, 11, Blackfriars Street, Manchester. Specialities: Mineral Black, Ven. Red, Ochres, and Umbers.

HINSHELWOOD, Thos., & Co., Glasgow. Manufacturers of High-Grade Colours of all classes. Samples submitted or matched on application.

LEVINSTEIN LIMITED, Crumpsall Vale Works, Manchester. Warehouse, 21, Minshull Street. Manufacturers of Specialities for Paper dyeing in all shades. Blackley Blues, Scarlets, &c. Whitcol P.A. for sizing.

The VIA GELLIA COLOUR Co., Matlock-Bath. Colours in every variety. Mineral Black. Washed Golden Ochres and Umbers. Enquiries solicited.

MINERAL WHITE.

BELVOIR, Newark-upon-Trent. The first makers in Newark, 1850.

CAFFERATA & Co., Newark-upon-Trent. Established over 40 years. Largest makers of Mineral White in the Kingdom.

HOWE, John & Co., Carlisle.

RAGS.

CHALMERS, E. & Co., Ltd., Bonnington, Leith.

SIZING, etc.

The GROVE CHEMICAL CO., Ltd., Appley Bridge, near Wigan, Lancashire. Glues, Gelatine, Size, Albumenoid, Dextrines, Farina, Starch, Painters' Glue, etc.

STEEL & BRONZE TOOLS.

MAKIN, Wm. & SONS, Sheffield, Estab-lished 1736. Roll Bars, Plates, Cutter Knives, Doctor Blades, etc.

STRAWBOARD CENTRES.

BOYD, HART & CO., Makers of Round, Square, and Square Centre Shells, 21, Exchange Square, Glasgow. Telegraphic address: "Strawboard." 9341

TALC.

LASSALLE, TH., Montlucon, France.

GYPSUM & TERRA ALBA.

WINSER & Co. (GOTHAM Co., LTD.), 312, Deansgate, Manchester, and Kegworth Mills, near Derby. Established over 40 Years

VENTILATING AND INDUCED DRAUGHT FAN MAKERS.

SAVE ON YOUR COAL BILL by using our Induced Draft Fan. At Oldham with three Boilers we are doing work that previously required four, and saving £28 a month in fuel. Write for particulars—SUTCLIFFE VENTILATING AND DRYING CO. Ltd., Cathedral Corner, Fennel Street, Manchester, Telephone No. 3920. Telegraphic Address: "VENTILABRO.

WOOD PULP.

ALSING & Co., Ltd., 110, Cannon Street, London, E.C. Agents for the well-known "K.K." Soda Pulp; also Sulphite and Mechanical.

GRANT, W. & Co., 4a, St. Andrew Square, Edinburgh. Agents for best shippers, Sulphite and Sulphate, Mechanical, Pine, Brown, Aspen.

WERTHEIM, A. & Co., Hamburg.

THE MANCHESTER ANILINE Co.,

20, High Street, Manchester.

SPECIALITIES:

MAGENTA, VIOLET, GREEN, METANIL YELLOW.

Mill-Hand Edition.

A Special Edition of *The World's Paper Trade Review* is published for supply only to bona-fide employees in Paper Mills.

The Annual Subscription is 6s. 6d., or 3s. 3d. for six months, PAYABLE IN ADVANCE.

New subscriptions are not accepted for any less period than six months, and must terminate at the end of a quarter, i.e., the last week in March, June, September, or December, and not at odd periods. Foreign subscribers must add, when remitting, the extra postage, i.e., 1s. 1d. for six months, or 2s. 2d. for the year.

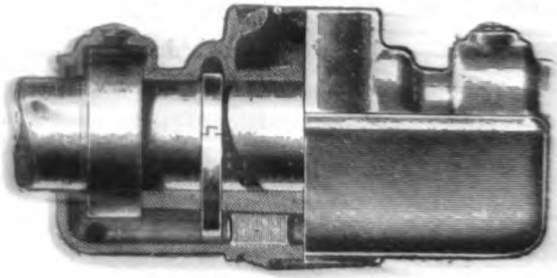
The receipt of a copy in a COLOURED WRAPPER denotes the termination of a subscription.

Offices: 58, Shoe Lane, London, E.C.

Digitized by Google

Patent Self-Oiling Bearings.

The "Unbreakable" Pulley and Mill Gearing Co., Ltd., West Gorton, Manchester, and 56, Cannon-street, London, E.C., have recently put upon the market



Self-Oiling Bearings.
(Inside View.)

an improved self-oiling bearing, of which we give two views. Self-oiling bearings are very largely in use on the Continent, and in this country in all industries where there is not much dirt or dust to contend with they are being increasingly employed. It will be seen from the illustration that in the design of the bearing in question, the company have adhered to the swivelling principle on which all their ordinary bearings are constructed, and the new self-oiler is made to fit the same hangers and pedestals as the standard swivel bearing lubricated in the ordinary way. The advantages claimed for the bearing under notice are:—

(*a*) Ample reservoir capacity. The 2-inch self-oiling bearing holds one pint of oil; the 3-inch two and a-half pints, and the other sizes in proportion. This ensures great length of run and ample space for settlement of dirt.

(*b*) No loose lids or covers.

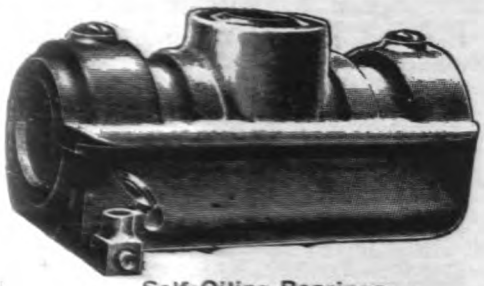
(*c*) The patent reversible elbow shown in the outside view serving for filling and level gauge when in position shown, and for emptying when reversed.

(*d*) The outer casing of the bearing is made long enough to include loose collars when they are required, so that these share in the lubrication.

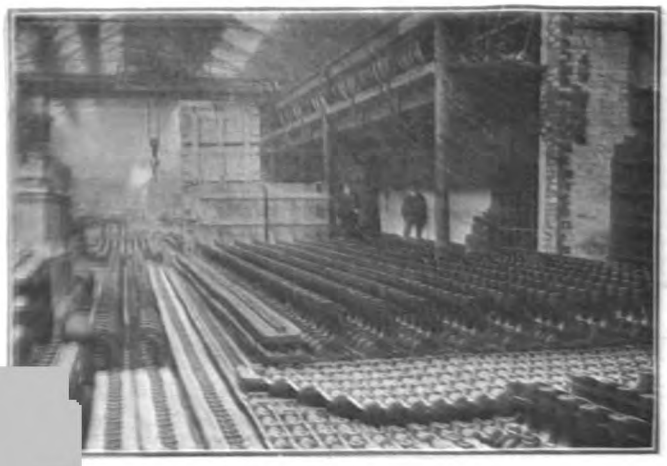
(*e*) Ample oil lifting by two rings.

(*f*) Everything in halves, including the rings, so that the bearing is easily put on the shaft.

We are informed that several modern factories have now been equipped with these bearings, and some striking results in regard to cleanliness, economy of oil and saving in friction obtained. In one instance 220 feet of 2-inch shafting driving by belt another line of 2-inch shafting 92 feet long—a total length of 312 feet altogether—carried in 35 of these bearings and loaded with pulleys with belts removed, was run at 260 revolutions per minute at an expenditure of 1¾ h.-p.; the power being transmitted electrically could be accurately measured. We need scarcely say that this is a very fine result. Were this 2-inch shafting doing its full work, it could transmit about 40 h.-p. at the speed given, so that the percentage lost in bearing friction would only be 4½. We give an illustration of 800 of these bearings with their hangers, forming one order for the new Small Arms Factory, at Ishapur, India.



Self-Oiling Bearings.
(Outside View.)



Self-Oiling Bearings.
Ready for Shipment.

GERMAN CHEMICALS.—The Badische Anilin und Soda, of Ludwigshafen-on-Rhine, last year made a profit of £583,787 and, after writing off £233,000 for depreciation, again pays a dividend of 26 per cent. The F. Bayer Colour Works, of Elberfeld, earned £301,638, and distributed 25 per cent., while the Meister Lucius Company, of Höchst-on-Main, netted £397,626, and pays 20 per cent.

Digitized by Google

Bear in Mind

That money may be wasted in advertising as easily as in any other way. Success depends upon the selection of proper mediums. The best is a well established and influential paper.

A PROPER MEDIUM IS

The World's Paper Trade Review,

which was established in 1879, and is the oldest weekly paper trade journal published in the United Kingdom.

WHAT THEY SAY ABOUT IT.

TESTIMONY OF ADVERTISERS:—

"It may interest you to know that our advertisement in your paper is bringing us a lot of orders for samples."—H. C. STANDAGE & Co., Birmingham.

"We have secured already several orders through the medium of your valued paper."—WOLF & Co., Water Lane, London.

"A journal in which we have great confidence . . . well aware of its circulation and ability."—The Grove Chemical Co., Limited.

"A widely circulating trade journal."—HARRY B. WOOD, Manchester.

APPRECIATION OF READERS:—

"We have for many years been, and still are, subscribers to your journal, which we are always reading with a great deal of interest, and which we consider to be one of the best journals of its kind in Europe.—BAMBLE AKTIE CELLULOSE FABRIK, Herre pr. Porsgrund, Norway.

"I take this opportunity to speak out that your journal has no equal of its kind in all countries."—M. BEHREND, Prince Bismarck's Paper Mills, Varzin, Germany.

"I appreciate the value of your journal, and find it of considerable benefit in my business."—H. A. Craigie, of S. D. Warren and Co., Cumberland Paper Mill, Me., U.S.A.

". . . widely circulated, both in this country and abroad."—Munns and Longden, Solicitors to the British Wood Pulp Association.

"We take great interest in the *Review*, reading it carefully every issue, and you may be sure that its excellence is appreciated in this direction."—Perkins, Goodwin and Co., Paper Stock Merchants, New York.

"The best paper trade journal in the world."—W. H. WILES, Milton Paper Mills, Bowling.

OPINIONS OF CONTEMPORARIES:—

"A widely informed and well managed enterprise, of great value to exporters for its exact Market Reports and statistics of raw material."—*Central-Blatt fur die Deutsche Papier-Fabrikation*, Dresden.

"The leading European exponent of the paper trade."—*American Paper Trade and Wood Pulp News.*

"This weekly journal, published at London, is the most important of those which deal with the paper industry."—(Translation from) *La Papeterie*, Paris, the official organ of the French Wholesale Stationers' Association.

"It is the leading journal identified with the paper industry in England. . . . . Well and intelligently conducted."—*The Paper Trade*, Chicago.

"The completeness of its Market Reports has made it indispensable to the Paper and Paper Stock Trades, and its dependability is recognised throughout Europe and America."—*The Printers' Register* London.

Is your firm's Advertisement now appearing in this well-known trade Journal?

If Not, Why Not?

Please Note. **The World's Paper Trade Review** is subscribed for not only by Paper Makers, and the Home, Foreign, and American Paper Stock and Mill furnishing Trades, but by the Managers and Workmen in Paper Mills, for whom a cheap edition is published; and the advertisement tariff includes insertion in both editions.

The *Review* is undoubtedly the best medium for all classes of advertisements relating to the paper, paper stock, engineering, and allied trades. Rates on application to the publishers, W. JOHN STONHILL & Co., 58, Shoe Lane, London, E.C.

Subscription £1 per Annum (post free) to all countries.

Digitized by Google

Commercial Intelligence.

Re ALLEN, GODFREY and CO., Printers and Advertising Contractors.

This was a sitting of the London Bankruptcy Court held before Mr. Registrar Giffard, on April 13th, for the public examination of Robert Howard Allen, who carried on business as above at 8 and 9, Gray's'-inn-passage, Red Lion-street, Holborn, and 25, Red Lion-street, W.C. The debtor filed his own petition last December, and has furnished accounts showing total liabilities £3,646 15s. 9d. (unsecured £858 6s. 2d.), and assets valued at £1,382 13s. 1d. after allowing £199 5s. 4d. for the preferential claims, or sufficient to yield a surplus of £524 6s. 11d. after payment of all debts. Replying to Mr. C. A. Pope, assistant receiver, the debtor said he started business, without capital, in 1896, as a printer and advertising agent, at 35, Kingsgate-street, High Holborn, in the name of Allen, Godfrey and Co. There was no partner but he thought that style sounded better than Allen, or Allen and Co. After trading for about twelve months, he desired to raise capital, with which view he converted the business into a limited company, registered as Allen, Godfrey and Co., Ltd., with a nominal capital of £3,000. Nothing was subscribed in cash at the time, but during the company's existence £300 shares and £400 debentures were issued. As vendor witness received £1,000 shares, and was appointed to the post of managing director at a weekly salary of £5. In 1900 the business was removed to 8 and 9, Gray's-inn-passage, Holborn, where it was continued until the middle of 1902, when a receiver was appointed on behalf of the debenture holders, witness being one of the number. He subsequently purchased the business from the receiver for £350, part of which he raised on loan from the London and South-western Bank. A claim had been made against him in respect of a portion of the purchase money. He disputed the claim with the result that it was taken into Court, where, on the application of counsel it was adjourned *sine die*. Since then witness had carried on the business by himself at the same address, with a warehouse in Red Lion-street. He had laid down printing plant at a cost of £400. The bookkeeping had been allowed to fall off somewhat since October last for the reason that he had been hard pressed for money. No attempt was ever made by witness to ascertain his financial position except that in July, 1903, he made out a rough profit and loss account and a balance sheet. In addition to the business of a printer, he had been dealing in house property, but those transactions had not contributed to his failure. Even now he did not admit insolvency, his appearance in the Court being due entirely to misfortune and the fact that he had a larger business than his capital would allow. Asked regarding a sum of £45 anticipated to be received from a firm with whom he had deposited a quantity of paper, the debtor said he regarded it as an absolutely free asset. It was true that the firm had a claim against him for warehousing charges, but it was not the fact that the paper was deposited as security for any debt due to them. The Official Receiver: I understand that on December 21st, shortly before the petition was filed, there was an extraordinary arrangement between you and your brother? Witness replied that there was an arrangement but he did not consider it an extraordinary one. It was true that his brother was at the present time practically continuing the business and naturally he obtained all the custom that he could get. Their positions were now reversed as witness was working for, instead of employing his brother. The latter purchased for £15 certain fixtures and sandwich boards at Red Lion-street and was carrying on the advertising business there. No money passed at the time of the purchase, but the agreed price was due to the brother for wages, who gave a receipt for the debt. The fixtures, etc., thus transferred were not worth anything like £15. Witness drew £200 a year from the business when it was his own property, and £5 a week when acting as managing director of the company. He attributed his failure to insufficiency of capital; heavy business expenses, including rent; inability to let off a portion of the premises; inability to collect in the book debts; law costs and interest on borrowed money. The rent of the Gray's-inn-passage premises was £240, which amount was increased to £360 a year by the taxes and insurance premiums. There was further 16s. a week to be paid for the rent of the warehouse in Red Lion-street. In conclusion the debtor admitted that when he transferred the fixtures and property to his brother, he was being sued by a printing company and by various other creditors. No valuation was made of the property transferred. The examination was ordered to be concluded.

Re WALTER HENRY PHILLIPS, Printer and Bag Maker.

At a sitting of the London Bankruptcy Court, held on Friday, April 15th, this debtor attended for public examination, upon accounts showing liabilities £377, and assets "bad debts £80 17s.," to which no value is attached. In reply to Mr. Walter Boyle, assistant receiver, the debtor stated that prior to January, 1900, he worked for his brother, who traded as a printer and bag maker at 39, Coburn-road, Bow. About that time his brother failed, and Mr. John Cordery, a builder, purchased the business from the official receiver for £85. Witness thereupon entered into partnership with Mr. Cordery, and was to have a one-third share

Digitized by Google

of the profits. The partnership was dissolved in April, 1900, Mr. Cordery taking £50 cash down and £1 per week for 75 weeks for his interest, and witness continuing the business in the name of Phillips and Co., and taking over the assets and liabilities. The business was fairly prosperous for the first year, but subsequently declined, and in February, 1903, it was in rather a bad way. His principal creditors (Messrs. D. Webb and Co.) were rather alarmed, and interviewed him as to his financial position. The Assistant Receiver: Did you tell them that your estate then represented 25s. or 30s. in the £? Witness replied that Messrs. Webb saw his books, from which no material facts or figures were omitted, although they were not then fully posted up. They consequently saw how he stood, and agreed to continue to supply him on credit. He had made them payments on account during the past year, but the amount of the debt had increased. The machinery on the premises was chiefly held on the hire purchase system; only £30 out of £180 worth being witness's own property. That fact was fully explained to Messrs. Webb in February, 1903. Witness traded until December 23rd, when he sold the business as it stood for £100 to Mr. W. R. Mason, by whom he was now employed. He paid away £85 of the £100 to creditors, and spent the balance on living expenses. About seven or eight years ago witness arranged with a Mr. Cockerton to enter into partnership in a printing business to be carried on at 24, Alfred-street, Bow. Mr. Cockerton, however, did not carry through the arrangement, and witness, after trading by himself for three months, closed it at a loss of £15. He attributed his failure to bad trade, bad debts, and heavy interest on borrowed money. The examination was ordered to be concluded. Appended is a list of the principal creditors, viz.:—

UNSECURED.

C. Foster, Virginia-road, Shoreditch	£18
W. Robertson, Tottenham-chambers, Tottenham-court-road, W.C.	22
P. Saunders, 11, Saville-row, W.	52
D. Webb and Co., 99, Red-cross-street, Southwark	230
Machinery Trust, Ltd., Fleet-street, E.C. ...	14

New "Limiteds."

GOLDEN VALLEY OCHRE and OXIDE CO., Limited.

Registered with a capital of £15,000, in £1 shares, to acquire the Golden Valley Ochre and Oxide Works at Wick, Gloucestershire, and to carry on the business of miners, smelters, quarrymen, lime burners, chemists, druggists, drysalters, oil and colour men, paint and colour grinders, manufacturers of and dealers in earth colours, oxides of iron, fullers' earth, strontia, ochre, and chemical, industrial, or other preparations, etc. No initial public issue. The first directors (to number not less than three nor more than five) are to be appointed by the signatories. Qualification, 100 shares. Remuneration as fixed by the company.

ALBION FOLDING BOX CO. (GLASGOW), Ltd.

Registered with a capital of £10,000, in £1 shares, to acquire and carry on the business of a company with similar title, trading as folding-box manufacturers and lithographers.

TWENTIETH CENTURY NEW TESTAMENT COMPANY.

Registered with 20 members, each liable for £5 in the event of winding up. The objects are to take over the preparation and publishing of the New Testament in modern English, known as the "Twentieth Century New Testament." The word "limited" is omitted from the title by license of the Board of Trade.

CROWN ART SOCIETY, Ltd.

Registered with a capital of £2,000, in £1 shares (1,500 preference), to acquire and carry on the business of fine art dealers, photo-reproducers, photographers, electrotypers, printers, publishers, etc., now carried on by A. B. Nielsen and A. L. Ponting at 9, Regent-street, W., as the Crown Art Society. No initial public issue. The first directors (to number not less than two nor more than three) are A. L. Ponting and A. B. Nielsen. Qualification, £100.

A. BURGON and CO., Ltd.

Registered with a capital of £20,000, in £1 shares (14,000 preference), to acquire the business now carried on by A. Burgon, at 75 and 79, Sackville-street, Manchester, as Burgon and Co., and to carry on the business of wood, cardboard, leather board, and fancy-box makers, stationers, printers, lithographers, engravers, card and leather board manufacturers, etc. No initial public issue. The first directors (to number not less than two nor more than seven) are A. Burgon (governing director), W. H. Bramwell, and W. H. Turner.

NORTH DEVON PRESS, Ltd.

Registered with a capital of £1,000, in £1 shares, to acquire the business now carried on by P. F. Marks at Barnstaple, including the copyright of the *North Devon Herald*, and to carry on the business of newspaper proprietors, publishers, and printers, stationers, booksellers, lithographers, etc. No initial public issue. The first directors are H. McWhinnie, H. G. W. McWhinnie, and T. H. Stevens.

L'ENTENTE CORDIALE PUBLISHING CO., Ltd.

Registered with a capital of £1,000, in £1 shares, to carry on, in England and elsewhere, the business of proprietors, printers, and publishers of newspapers, journals, magazines, books and other literary works and undertakings, etc. No initial public issue. Registered without articles of association.

Digitized by Google

General Notes.

THE publishing business of Isbister and Co. has been taken over by Sir Isaac Pitman and Sons, Ltd. It will be continued at the old address of Tavistock-street, Covent-garden, as well as under the familiar name, which has been so long identified with the well-known monthlies, *Good Words* and the *Sunday Magazine*.

ELECTRICAL DRIVING.—That the advantages of electrical operation of works and factories are becoming practically self-evident is demonstrated in the presidential addresses in engineering societies. Recently the president of the Sheffield Society of Engineers and Metallurgists stated: "The engineer of ordinary ability found in electricity a simple means for remedying extravagances in works more readily than by any other method, and consequently welcomed its introduction. In large works the introduction of a central power station had been a means of doing away with miles of steam pipes connected with the various outlying engines, which caused great loss of economy from condensation. Boilers of high pressure were put down close to the central power station. These, with the electric distribution plant, gave an efficiency of, in many cases, more than 50 per cent. ahead of the old conditions of outlying steam engines. The wages of engine tenters were to a great extent saved, as the various motors throughout the works merely required periodical visiting at much less cost than the engine tenters' wages added up to." Messrs. Johnson and Phillips, of Old Charlton, Kent, have sent us a handbook entitled "The Application of Electric Motors to Machine Driving," and we understand a copy will be forwarded to those contemplating the introduction of electric driving in works, especially the iron and metal, paper, and printing trades, to the latter of which a considerable space is devoted.

LIVERPOOL.—The Colonial Products Exhibition, held in Liverpool in January—the first undertaking of the kind organised outside the Metropolis—had for its object the affording of opportunities of inspecting a numerous and varied collection of samples of raw produce and articles of manufacture with which our Colonial possessions are able to supply the Mother Country is ever-increasing, and by general consent it proved a brilliant success. An interesting little souvenir has just been published, giving a résumé of the principal details of the Exhibition, and recapitulating some of the many flattering notices and opinions concerning it, along with portraits of the chairmen of the opening ceremonies on each of the four days, and principal officials of the Exhibition, preceded with a view of the fine St. George's Hall, in which it was held. It is interesting to note that the next Exhibition on the same lines, but on a larger scale, has already been arranged and will be held in the St. George's Hall from January 9th to 19th, 1905, inclusive, when the whole of the ground floor space will be utilised. Sir Alfred L. Jones, K.C.M.G., whose valuable assistance was so helpful in making the last Exhibition so successful, has again consented to become President, and the management will be undertaken as before by Mr. H. E. Jones and Mr. A. Douglass. A lengthy list of influential patrons is given in the above-mentioned souvenir, as well as the rules and regulations of the forthcoming Exhibition.

"SOME NEGLECTED ASPECTS OF THE FISCAL QUESTION" is the title of an interesting pamphlet by Mr. John Shanks, Tubal Works, Barrhead, N.B., and published by Messrs. David Bryce and Son, Glasgow. The author treats his subject under the following four heads:—"Efficiency, and restriction in general," "Trades Union restrictions—men and machinery," "Piece-work, the bonus system, and the relations of master and men," and "Motive power, freights, and business methods."

AMERICAN STATIONERS' ORGANISE.—A movement is well under way, headed by most of the prominent stationers of the United States to form a National Association. A convention will be held in Chicago in October to perfect the organisation. Mentioned in connection with the movement are Henry C. Bainbridge, president of the Stationers' Board of Trade of New York; Frank D. Waterman, of the L. E. Waterman Co.; the Samuel Ward Co., Boston; J. R. Weldin and Co., Pittsburg; William G. Johnson and Co., Pittsburg; Scranton, Wetmore and Co., Rochester, N.Y.; Foreman, Bassett and Hatch Co., Cleveland; T. Fitzwilliam and Co., New Orleans; Clarke and Courts, Galveston, Tex.; John Schlener and Co., Minneapolis; W. A. Webb, Cincinnati; the Lambert, Deacon and Hull Printing Co., St. Louis; Richmond and Backus Co., Detroit; A. C. McClurg and Co., Chicago; Pettibone, Sawtell and Co., Chicago; the J. G. Gill Co., Portland, Ore., and the LeCount Brothers Co., San Francisco. The stationers have long felt the need of such an organisation, through which such co-operation can be secured as will correct the ruinous cutting of prices and other disastrous customs that have grown up through the years.

AMERICAN ENQUIRIES FOR BRITISH PAPER.—H.M. Consul at Chicago reports that enquiries have been received for the names of British manufacturers in a position to supply the following:—Tissues and copy-book papers; tinfoils; glazed surface papers, especially coloured; lighter weights of cardboard; real vegetable parchment; imitation parchment; grease-proof paper; also red rosin building paper and felt roofing.

Digitized by Google

The World's Paper Trade Review

A WEEKLY JOURNAL FOR PAPER MAKERS & ENGINEERS.

[REGISTERED AT THE GENERAL POST OFFICE AS A NEWSPAER FOR TRANSMISSION IN THE UNITED KINGDOM.]

TWENTY-FIFTH YEAR.

VOLUME XLII. NUMBER 19. LONDON: MAY 6, 1904. PRICE SIXPENCE EVERY FRIDAY.

W. G. TAYLOR and Co., Ltd.,

126, Queen Victoria Street, London,

5, CROSS ST., MANCHESTER, AND AT EDINBURGH.

Telegrams:—"FIBRE, LONDON," Telephone:—990, BANK.

Soda Wood Pulp } BLEACHED and UNBLEACHED

Sulphite „ „ }

ALSO MECHANICAL, WET AND DRY.

All of the Best Swedish, Norwegian, American and Canadian Manufacture.

Sole Agents for Chr. Wandels' Strainers, Fibre Catchers, and Wires, including the Original and Improved

WANDEL ROTARY STRAINER

Made in Thirty different Sizes.

Digitized by Google

PURE ALKALI

Crescent Brand. B.M&Co. Trade Mark.

GUARANTEED 58 DEGREES.

Equal to 98 per Cent. Carbonate of Soda.

The STRONGEST and PUREST Form of the Article in the Market and therefore the MOST ECONOMICAL for the use of Papermakers, Printers, Bleachers, Wool Scourers, Dyers, Glass, and Soap Makers.

BICARBONATE OF SODA,

☛ REFINED and RECRYSTALLISED.
The PUREST and CHEAPEST in the Market.

SODA CRYSTALS

OF THE FINEST QUALITY.

Concentrated Crystal Soda

(*Sesqui Carbonate*)

The PUREST and CHEAPEST form of Washing Soda. 1-lb. of Concentrated Crystal Soda does the work of 2-lbs. of Washing Soda. Constant composition in all Climates. Readily Soluble. Harmless to the finest fabrics and to the Skin.

BRUNNER, MOND & CO., LTD

NORTHWICH, CHESHIRE.

Digitized by Google

The World's Paper Trade Review
A WEEKLY JOURNAL FOR PAPER MAKERS & ENGINEERS.

[REGISTERED AT THE GENERAL POST OFFICE AS A NEWSPAPER FOR TRANSMISSION IN THE UNITED KINGDOM.]

TWENTY-FIFTH YEAR.

VOLUME XLII.
NUMBER 19.

LONDON: MAY 6, 1904.

PRICE SIXPENCE, EVERY FRIDAY.

The Specific Gravity or Density OF PAPER.

Dr. Klemm's Criticism on "C. B. S. Units and Standard Paper Tests."

A Reply by Mr. Clayton Beadle.

I read with very great interest Dr. Paul Klemm's review and criticism in the February number of *Wochenblatt fur Papier-Fabrikation* on Messrs. Cross, Bevan, Beadle and Sindall's publication, "C. B. S. Units." I was much gratified to see that so eminent an authority as Dr. Klemm should have devoted so much attention to a careful examination of the methods which we have instituted in reference to Paper Testing. There are many conclusions, however, in Dr. Klemm's criticisms which I do not think are justifiable.

Neither the apparent "specific gravity" nor the "actual specific gravity" of any given paper vary to any extent with change of atmospheric condition. The changes are so slight that for all practical purposes they may be ignored, and if taken into consideration would not in any way affect conclusions that would be drawn from figures derived from the "C. B. S. Units."

Dr. Klemm admits the value of the "air content" of paper. I have recently found that there is a distinct and direct relationship between the so-called air content or volume of air space in a blotting paper and its capillary attraction. A table of these will shortly be published in an article which the writer has in preparation on behalf of Messrs. George Newnes, Ltd. The relationship between the air content and opacity of a pure paper can easily be established by measurement. In these respects Dr. Klemm is in agreement with us as to the value of these figures.

The reason for establishing a figure for bulk which we have done is a fairly obvious one. It is assumed that a pure paper containing no ash but consisting of pure cellulose when compressed to the extent of containing no air spaces would be represented by the figure 1·00, its specific gravity as well as its apparent specific gravity would then be 1·50. Our figures for "bulk" are all based on this as a unit. If the paper contained 50 per cent. of air space and 50 per cent. of fibre the bulk would be represented by the figure 2·00 and so on.

Dr. Klemm is wrong in assuming that the authors took no account of the mineral fillers. We have the strongest proofs that a mineral substance does not add to the bulk of a paper, at any rate unless the amount of mineral added is so great as to render the paper almost useless. The mineral occupies the spaces in between the fibres and tends to fill up the air spaces. This we had proof of from numerous results, but did not consider it necessary to go in to an explanation of this in our book.

We did not, after full consideration, consider it necessary to take into account the volume percentages of the gelatine and rosin. To have made a

Digitized by Google

analysis of the paper for these ingredients, and to have taken these into account would have involved an immense amount of labour and would have delayed the publication by possibly six months, and there would have been no practical benefit gained. Furthermore the "C. B. S. Units" are designed for the use of the Works Chemist, and it is impossible for the ordinary Works Chemist to analyse papers for these constituents and to include the volume percentages of same in his figures.

We do not find the difficulty in measuring the thickness of paper which Dr. Klemm anticipates. It is necessary, of course, that a certain pressure only should be exerted on the surface of the paper. The pressure must be constant for all the figures for the purpose of comparison. The taking of ten discs under such circumstances minimises any possible error in this direction. This was tested by repeating the figures when first the papers were tested; the results were found to be wonderfully concordant.

As to the specific gravity of cellulose, this is wonderfully constant, both Mr. Cross and myself have at different times determined the specific gravity of a number of fibres, both in the raw state and the cellulose derived from same. The figure is very close to the figure 1·50, and varies very little from it, nothing like to the extent which Dr. Klemm suggests from the figures given in his examples; so little that variation of 1 per cent. is extremely unlikely in the percentage by volume due to this error.

Again, the average of 2·50 for the specific gravity of mineral substances was only arrived at after careful consideration. Taking the mineral substances used in the manufacture of paper, with the exception of barytes, there is very little variation from the figure 2·5, although a greater variation than in the case of the specific gravity of cellulose. If the composition of the mineral substance is not known I think the error is not sufficient to detract from the practical value of the tests, and I would remind Dr. Klemm that in paper works where tables have not yet to be "absolute" but "comparative," and where they must be arrived at without the expenditure of time and money the C.B.S. Units will be found extremely useful. I have already found that these units are much appreciated by some of the largest buyers of paper in this country.

It is important that we should be able to ascertain the working strength of papers so that a specification can be practically absolute and understood by all concerned. There is only one way of expressing the relative strength of different fibre substances for eliminating the factor of weight.

CHARLES BEADLE.

Paper and cardboard were exported from Hungary last year to the amount of 1,250 tons, as against 900 tons in 1902 and 1,200 tons in 1901.

Paper exports to Roumania in 1903 were worth £60,000, as against £50,000 in 1902.

French Papermakers' Association

The Proposed Increase of the Price of Paper.

On Monday afternoon, the 25th ult., a well attended meeting of the French Papermakers' Association was held at the rooms of the Cercle de la Librairie, Paris, for the purpose of discussing this question.

The President of the Association, M. Outhenin Chalandre, occupied the chair, and in the course of a lengthy statement on the condition of affairs in the French paper trade, said that he was inclined to attribute it, to a large extent, to the effect produced by the Russo-Japanese War. There was naturally a great demand for news, and European, British and American newspaper proprietors were either enlarging their journals or printing large quantities of extra copies. This of course entailed a greatly increased consumption of paper and correspondingly of wood pulp. With regard to this latter commodity, nearly all the available stocks in the market had been bought up by various big paper mills, with the result that a great scarcity now prevailed, and prices had gone up to the extent of 30 per cent. The situation was likely to become still more acute as it was generally supposed, the Scandinavian Association of Wood Pulp Manufacturers carry out their decision to reduce the output of their mills. In conclusion, M. Outhenin Chalandre said that a rise in the selling price of paper was inevitable, but he did not think that a hard and fast decision on the point should be hurriedly arrived at, as it was quite possible that a first rise would soon have to be followed by a second.

A long discussion ensued, and ultimately the meeting adopted a suggestion made by the President, viz., that each of the members of the Association should issue a circular to his customers, acquainting them with the situation and intimating that a rise in prices would have to declared very shortly.

The exact extent of the rise was not decided upon, the general feeling of the meeting being that this was a point as to which they had to be guided by circumstances arising within the next few days, and especially with regard to the wood pulp market, but it seems evident that 15 per cent. will be the minimum increase declared.

A similar decision was arrived at, on the Saturday previous, by the Central Committee of the various French Paper Trade Associations, at a meeting held in Paris, and presided over by M. Outhenin-Chalandre.

If you have second-hand machinery for sale, use the columns of *The World's Paper Trade Review*. It reaches buyers everywhere. For "Situations Vacant" and "Situations Wanted," the *Review* is the recognised medium.

Advertise in this paper! It pays!!

Digitized by Google

City and Guilds of London Institute

TECHNOLOGICAL EXAMINATIONS, 1904.

The following is a list of the questions set papermaking students attending the examinations in connection with the above Institute on Saturday last, 2.30 to 6.30 :—

ORDINARY GRADE.

Not more than eight questions should be attempted.

1. What is the volume of a ton of water? Give an approximate estimate of the dimensions of a reel of newspaper weighing 250 kilos. What is the thickness of a cigarette-paper, and the approximate weight per square metre? (25 marks.)

2. What dyes would you use for the production of the following papers :—Geranium red, canary yellow, fast blue? State the precautions you would adopt to produce the best results, most economically, in each case. (25.)

3. Specify furnish for (*a*) best white blottings, (*b*) biscuit caps, (*c*) cutlery wrapping. Contrast the details of preparation of the stuff in relation to the particular qualities. (25.)

4. State the materials you consider most suitable for the production of a buff copying, and give a brief outline as to how you would treat them so as to give the desired characteristics to the finished sheet. (25.)

5. Write a short account of the water-soluble compounds of cellulose. (25.)

6. How would you manipulate the various parts of the papermaking machine in order to produce a fine printing, the underside of which would be, as nearly as possible, as smooth as the top side? (20.)

7. Specify composition of normal papers (*a*) for documents of permanent value, (*b*) for book papers. Explain the defects in chemical composition to be avoided. (25.)

8. State the characteristics most desirable in a "body" paper for surface enamelling. Give the proportions of the materials you would use, and state how you would handle the beating tackle. (30.)

9. Give practical details for making, storing, distributing, and using bleach liquor in the mill. State what you know of the chemistry of bleaching powder, and the bleaching action of its solution. (25).

10. Describe briefly Marshall's patent drive for the papermaking machine, and state the advantages you consider to be gained by its adoption. (20.)

11. What are the special chemical and physical features of (*a*) chemical filter papers, (*b*) blottings, (*c*) grease-proof, (*d*) paper for protecting photographic films and plates, (*e*) paper for wrapping cutlery and plate, (*f*) cable papers. How would you test each in regard to special use? (25.)

12. What advantages are to be gained by covering steam pipes with non-conducting material? Give an estimate of the saving which may be effected in a modern two-machine mill in which a complete system of covering is adopted. (30.)

HONOURS GRADE.

Not more than eight questions should be attempted.

1. Examine critically the efficiency of a beating engine, both as to economy of power and control of the range of effects required in the preparation of an esparto furnish. (30 marks.)

2. Discuss the question of rope *versus* belt driving for the paper mill machinery. (20.)

(3) How would you investigate the effects of calendering upon the physical properties of papers? Show in what respects the ordinary methods of paper testing fail to exhaust the problems involved. (25.)

4. How would you proceed to ensure accurate register if, on starting to make an E.S. writing, the distance between the water-marks was an eighth of an inch too small? (20.)

5. What are the limitations of wood pulp (cellulose) in regard to papermaking effects? How far is this due to structural and chemical features of the cellulose, and how far to deficiencies in treatment in the mill? (25.)

6. What plan would you adopt to guard against excess of soda when supplementing causticised soda liquor with 77 per cent. alkali in boiling esparto? (25.)

7. In colouring or dyeing papers in the engine, what causes affect the permanence of the effect? How would you examine dyed papers in regard to the quality of fastness? Specify for a fast medium blue, red, yellow, and brown, on pure cellulose papers. (25.)

8. State your opinion regarding the adoption of gas for motive power in the paper mill, and describe any gas-producing system with which you are acquainted. (25.)

9. What are the main causes of the deterioration of book papers? Give a chemical account of the effects referred to and their specific causes. (25.)

10. What are the special requirements most desirable in a paper for photographic prints? Draw up a scheme for the production of such a paper to sell at 6d. per lb., stating the materials you would use and the precautions you would adopt to ensure the best results. (30.)

11. State what happens when a drop of iron gallo-tannic ink diffuses into a blotting paper. What use would you make of your observations in comparing the qualities of blottings and controlling the processes of manufacture? (25.)

12. How would you manipulate the various parts of the machine when making "news" at a high speed, so as to produce large equal-bulking reels, free from breaks? (25.)

AT the port of Calais 547 tons of rags were imported from the United Kingdom in 1903. In the previous year 859 tons were received.

THE imports of China Clay at Boulogn last year were 551 tons, compared with 50 tons in the previous year.

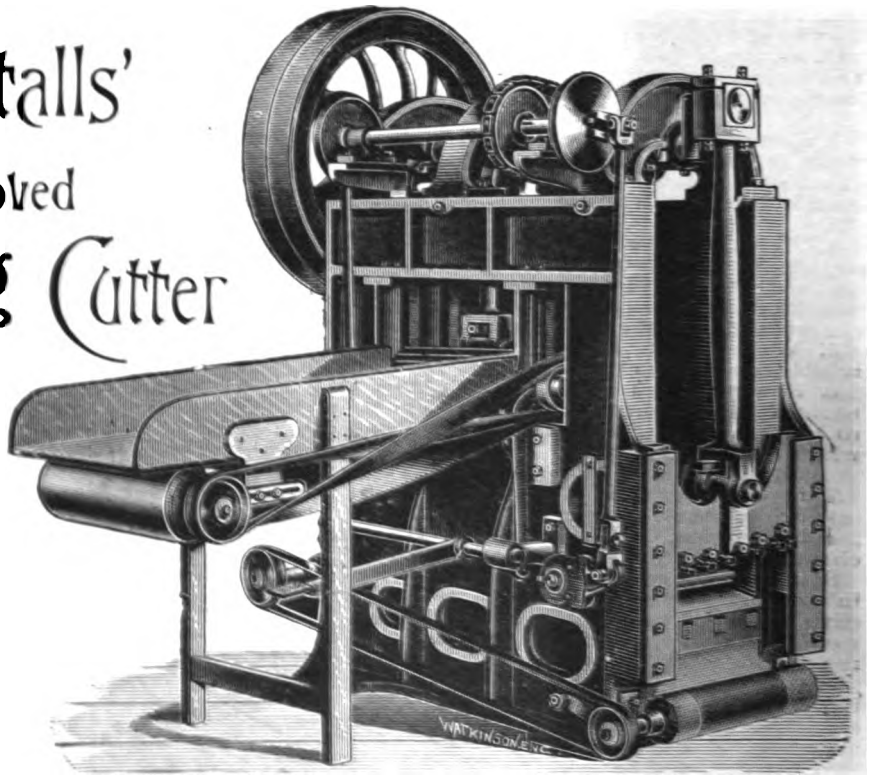
Digitized by Google

BENTLEY

Papermaker

BURY, nea

Nuttalls' Improved Rag Cutter



This Machine has now been Greatly Strengthened and Simplified, and its Output Capacity Increased. It is Equally Effective upon the Strongest and Lightest Materials, and will Cut Every Class of Stock.

Sole British Makers of t

NO WELL EQUIPPED PA

FULL PARTICULA

Digitized by Google

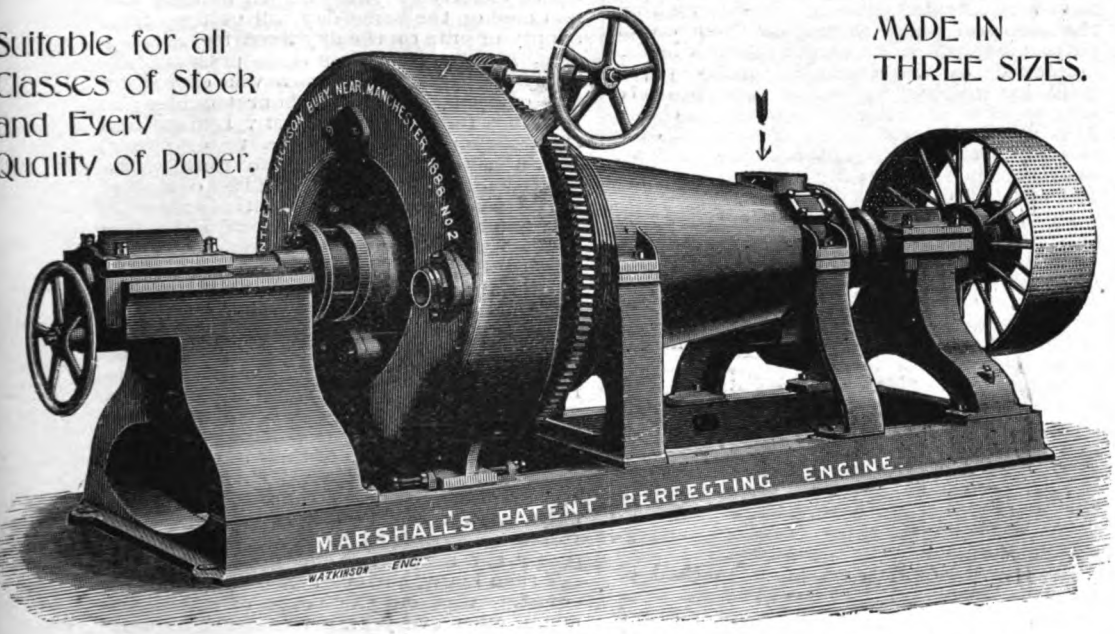
nd JACKSON LIMITED.

Engineers, MANCHESTER.

Marshall's PATENT Perfecting Engine

Suitable for all Classes of Stock and Every Quality of Paper.

MADE IN THREE SIZES.



This Engine will produce a Better Finished, Stronger, and More Even Sheet of Paper from the same Materials than can be produced by any other Mechanical Process, and at the same time will REDUCE the TIME and POWER Required for Beating.

COBURN-TAYLOR Machine.

ILL SHOULD BE WITHOUT.

ON APPLICATION.

Digitized by Google

Temperley's Syphon Mould.

The Production of Small Sample Sheets of Paper, Bleached Pulps, etc.

This handy apparatus has been devised for the production of small patterns (4 × 3 in.), especially where the quantity of pulp is far too small (¼ to 1 oz.) to operate an ordinary hand mould, or where the fibre must all be made up to estimate loss or yield, as in boiling, bleaching, loading, and sizing experiments.

In cases where it is required to ascertain the proportion of water to fibre in any of the above mill processes, or from the beater, chest, breast-box of machine, etc., this is rapidly estimated if the pulp is made in sheets, by aid of the mould, before drying.

The mould is already in extensive use by paper mill chemists, also the leading technical schools for bleaching and dyeing trials. Indeed, many workmen and students use them at home for private experiments. Manufacturers of aniline colours for paper have long adopted these moulds for making the coloured pulps shown in their useful pattern books. In this connection it is also employed by beatermen in many paper mills for making samples of new shades to save trouble of going down to the machine. This avoids the risk of running trials over the wire, where it is sometimes inconvenient, owing to the stoppage of the machine or the full width of deckle being used.

One great advantage is that by squeezing the excess of water from the fibres and weighing the latter into different lots, then diluting same when poured into mould, any number of sheets can be quickly produced of equal size *in any desired substance*. This is brought about by the area of the mould being known and constant.

By having moulds or filters covered with different meshes of machine wire 50° to 90° mesh or up to 200°, many useful experiments can easily be performed in *fractional* separations. Examples will readily suggest themselves to the energetic mill chemist, in the examination of backwaters, mixtures of fibres during bleaching, beating, sizing, loading, and colouring operations.

Further particulars of price, method of working the mould, may be obtained from the makers, the well-known firm of wire and dandy roll makers, Messrs. W. Green and Son, 134, Albany-road, London, S.E.

THE "MADE IN GERMANY" ABOLITION BILL.—The "Made in Germany" abolition Bill, which Sir Howard Vincent introduced into the House of Commons on Monday, proposes to amend the 16th section of the Merchandise Marks Act in order that, instead of giving a specific advertisement to foreign manufactures by such phrases as "Made in Germany," a declaration in the words "Imported" or "Made Abroad" shall be considered sufficient indication of foreign origin.

The American "Paper Trust."

Fears of Labour Troubles.

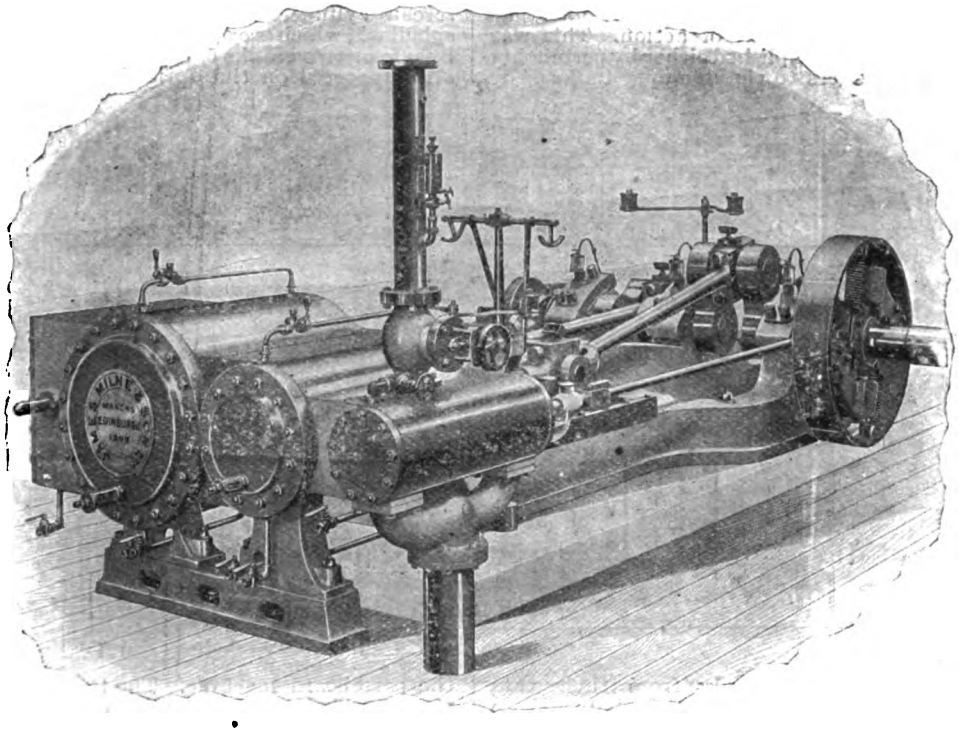
The newspaper interests have already presented their case before the Committee of the Judiciary of the House of Representatives, Washington, D.C., alleging the "Paper Trust" in the United States to be an illegal combination doing business in restraint of trade. In behalf of papermakers, Mr. C. W. Lyman recently appeared before the Committee and read an affidavit of Mr. Chisholm and Mr. T. T. Waller, president and second vice-president respectively of the International Paper Co., New York. He stated that the cause of the shut-down of the news mills last November was a shortage of pulp. Asked whether it was not rather unusual that this shortage of wood pulp should be felt only by the mills of the International Paper Co. and the General Paper Co., and that it should be felt on the same day from Maine to California, and that the mills closed down on the same day and remained closed exactly the same length of time and resumed on the same day, all getting their supply of pulp on the day fixed for resumption, Mr. Lyman, after some pressure, admitted that the shut-down was caused by the company's fear of labour troubles; in fact they feared a strike. Mr. Lyman said that, although labour, pulp, water power, etc., were cheaper in Canada than in the United States, American mills competed with Canadian mills even to the extent of invading their home markets. The relative cost of manufacture in Canada and the United States did not differ, which Mr. Lyman thought was accounted for owing to Canadian labour not being so efficient. The International Paper Co., said Mr. Lyman, preferred that the tariff be continued on both paper and pulp in order that the papermaking industry may remain in the States. Mr. Lyman admitted, in answer to questions, that the price of paper had not decreased since the combination of mills into the International Paper Co. He said that during the framing of the Dingley Tariff bill the International Co. had promised that the price would be cheapened to the consumers, but that it had not been so cheapened. "We did not then know, however," he said, "that this country was on the verge of a business boom, when everything would get higher." The combination, he said, was made to end ruinous competition and to cheapen the cost of production. As to the higher quotations, Mr. Lyman said the increase in price in 1903 over 1902 was but 5 per cent., and that the increase for one year had been but 1.90 dols., instead of 5 dols., as stated by Mr. Seitz, and for four years but 2.16 dols., instead of 10 dols. The International Paper Co.'s replies to the statements of Mr. Don C. Seitz, of the *New York World*, and Mr. John Norris, of the *New York Times*, were published in last week's issue of the *World's Paper Trade Review*.

Digitized by Google

JAMES MILNE and SON,
LIMITED.

MILTON HOUSE WORKS,

EDINBURGH.



Automatic Expansion Compound Steam Engine with Shaft Governor and Balanced Piston Valve.

High Speed Paper Machines, Paper Cutters, Patent Reelers, and All Accessories.

Estimates Furnished and Repairs Effected at Shortest Notice.

Telegrams:—"MILNE, EDINBURGH." Telephone No. 792
ABC Code, 4th and 5th Editions.

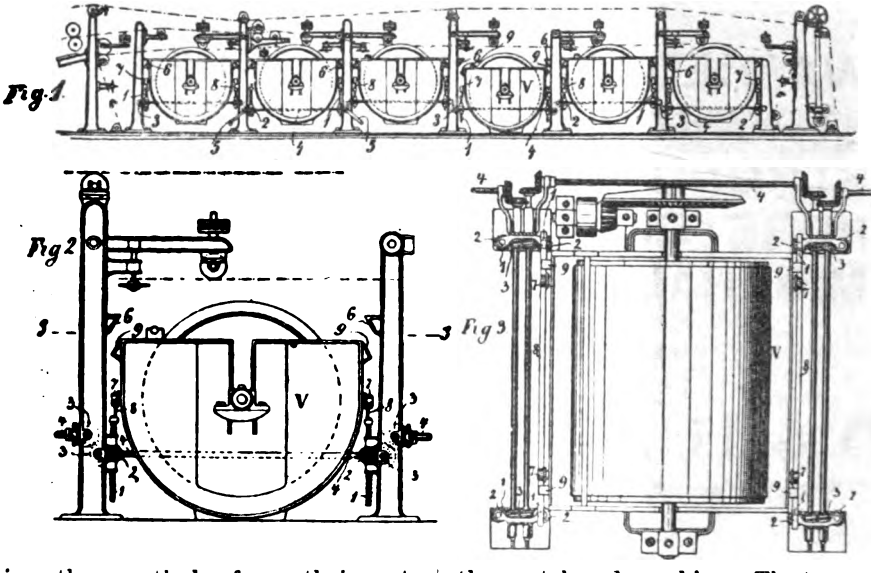
Digitized by Google

Paper Boards.

Among the patents recently issued is one to Mr. Paul Priem, of Heidenheim-on-the-Brenz, Germany, for a new form of machine for making paper board. In his specifications the inventor says: "In the well-known machines for making paper board, in which a plurality of screen cylinders are used, one behind the other, a board of uniform thickness is obtained when all the different cylinders are used. When by the same machine thinner board has to be made, the fibrous layers on the different cylinders have not to be taken off by the felt; but, according to the thickness required for the board, one or more screen cylinders must be cut out—that is to say, placed out of action. This was heretofore accomplished either by permitting these cylinders to run in empty tanks or by removing them entirely from their vats before the machine was started. These methods, however, were objectionable, as they were connected with a considerable loss of time.

"The object of this invention is to furnish a means for cutting out any desired number of screen cylinders, so that board of any desired thickness can be made in the simplest possible manner. This is accomplished by removing some of the screen cylinders, by means of suitable gearings, away from the felt. As these cylinders are usually located vertically below the course of the paper, the removing of the cylinders is preferably accomplished by a lowering of the same either in their vats or together with their vats. This arrangement furnishes the additional advantage that single vats can be withdrawn with the cylinders in lateral direction without interrupting the operation of the board machine. This is the more advantageous, as in this manner any repairs or the introduction of reserve parts and the cleaning of the screen cylinders which is necessary from time to time by means of steam or hot water for removing the adhering gum and fibres from the screens and the cleaning of the vats can be accomplished without interrupting the working of the machine. In the accompanying drawings, Fig. 1 represents a side elevation of a board machine with one of the screen cylinders and its vat cut out—that is to say, lowered below the fibre carrying felt. Fig. 2 is a side elevation of one of the cut out or lowered screen cylinders, drawn on a larger scale; and Fig. 3 is a plan view of Fig. 2.

"In the machine for making board, shown in the drawings, any one of the vats V is lowered or raised simultaneously with its screen cylinder by means of four screw spindles 1, which are operated simultaneously by one or two cranks 5, the shafts of which are supported on the upright standards of



the pasteboard machine. The transmission of motion from the crank to the spindle and from one spindle to the other spindle of the same vat is accomplished by means of a worm gear 2, bevelled gears 3, and cross-shafts 4. The vat V is thereby lowered simultaneously with the screen cylinder supported in the same. One of the screen cylinders is shown in Fig. 1 in lowered position. The vats are supported by rollers 7 on rails 8, which are carried by the screw spindles 1 and lowered or raised by the same. When any one of the vats—as, for instance, the third one from the right hand side of Fig. 1—is lowered, it can be moved laterally by the rollers 7 on the rails 8 clear of the standards of the machine, after which when necessary the vat can be further transported by means of a movable crane, or placed on a portable supporting frame for repairs, etc.

"In place of the mechanism for raising and lowering the screen cylinder or for moving the same sidewise out of the ma-

Digitized by Google

chine, any other mechanism for accomplishing the same result may be used—as, for instance, eccentrics and toggle levers, guide rods, etc.—while for the lateral removal of the vats in place of the rollers and rails, special tracks may be used, which are placed below the vat, on which the same is lowered.

"For replacing the vat, with its screen cylinder, accurately in its proper position, and for supporting the same in this position during the running of the machine, inclined brackets 6 are employed, which project from the standards and against which inclined stops 9 at the upper ends of the vat abut. The lateral movement of the vats can also be readily accomplished in such cases, in which the screens are lowered within the vats, and not with the same, as shown in the drawings.

"The supply of pulp, the motion transmitting mechanisms for the cylinders, etc., have to be so arranged and connected with the vats and screen cylinders that the lowering and lateral removal of the vats and screen cylinders can be accomplished without any difficulty in disconnecting the parts."

Standard Shades. **COLOURS** Specially Prepared for Papermakers

Strong Rich Tints in Mineral Colours.

PERMANENT AGAINST LIGHT & HEAT.

WASHED GOLDEN OCHRES
STRONG ENGLISH OCHRES
STRONG ENGLISH UMBERS
PURE RED OXIDES.
MINERAL BLACK.

A Special Line TURKEY RED.

If not already buying from us, oblige by sending Post Card for line of Samples and Quotations.

VIA GELLIA COLOUR CO., Matlock-Bath.

Manchester Office: 22, EXCHANGE BUILDINGS, St. MARY'S GATE.

Telegrams:—"COLOURS, MATLOCK-BATH." "STEADY, MANCHESTER." Nat. Tel. No. 44, MATLOCK.

TRADE MARK.

LÖVENSKIOLD-FOSSUM,

SKIEN, NORWAY.

EXPORTER OF

Moist Pine Pulp.

Sole Agents for England and Ireland:—
HANS DESSEN & CO.,
2, Great Winchester, Street, LONDON, E.C.

Sole Agents for Scotland:—
W. GRANT & CO.,
4a, St. Andrew Square, EDINBURGH.

Digitized by Google

American Coated Papers.

Manufacturers Complain that Present Low Prices are Unprofitable.

There is an over-production of enamelled, surface-coated, and glazed papers in the United States, and the severe competition amongst manufacturers has, it is stated, reduced prices to an unprofitable level. For the purpose of discussing the present conditions of the industry, a meeting of coated paper manufacturers was recently held in New York. The idea of a consolidation of all coated plants in the country was not entertained, and an aversion was shown to the establishment of a general selling agency. Eventually a committee was appointed to draw up a plan for the abolition of existing evils in the trade, and for the co-operation of its members. This will be submitted at a meeting to be held in the near future.

Sulphurous Acid.

A Company Formed in the United States to Exploit a New Method of Manufacture.

Sulphite mills will be interested in a new process for making sulphurous acid, patented by Mr. Paul Drewsen, of New York, and Mr. John Parent, of Shawano, Wis. The process has been in practical operation at the mill of the Wolf River Paper and Fibre Co., Shawano, where Mr. Parent is engaged.

The process, it is reported, is so simple and does away with so much expense in first cost and subsequent maintenance that competent sulphite men who have examined it say it will simply revolutionise present acid-making methods. The apparatus consists simply of a wooden box of size suitable for the amount of acid to be made, provided at the bottom at frequent intervals with agitators. The milk of lime enters the box at one end and the sulphur gases at the other. The agitators make between 400 and 500 revolutions and produce a very violent commotion in the liquid, throwing it up against the top of the box and offering a great absorption surface for the gases to reach. From five to ten minutes treatment is all that is required, and the acid flows in a continuous stream out of the box. The process is in every way continuous and automatic. When the machinery stops the flow of liquor stops, and no milk of lime can run into the acid. There is also no chance for the settling of lime and monosulphite of lime. There are no pressure or vacuum pumps, no large tanks, very little power and no expensive help.

A company known as the Drewsen-Parent Construction Co. has been formed to exploit the new invention, Mr. Paul Drewsen, of New York, is president; Mr. John Parent, of Shawano, vice-president, and Mr. F. E. Lueke, of Shawano, secretary, treasurer and manager.

Cay-gio, or Paper Tree.

M. Beau, the Governor-General of Indo-China, has just authorised the construction of a small factory in Tonquin, for the purpose of making paper from the cay-gio, or paper tree, which is found growing pretty freely by the roadsides and elsewhere in the district of the Tonkinese Delta. Its fibrous tissue is said to be extremely fine, and capable of being worked up into paper of a high degree of suppleness and solidity. The French are hoping that in a little time they will by the aid of this material, manufacture their own "English" and "Japanese" papers instead of having to import them.

Exports of British Paper.

The following returns show the exports of British paper during the week ended Saturday last:—

From London.

PRINTINGS. — To Australia, 3,344 cwts.; Africa, 79 cwts.; Belgium, 257 cwts.; Chile, 20 cwts.; Cape, 99 cwts.; Canada, 81 cwts.; China, 441 cwts.; Denmark, 21 cwts.; France, 1,124 cwts.; Fiji Islands, 73 cwts.; Germany, 6 cwts.; Holland, 54 cwts.; India, 1,027 cwts.; Japan, 286 cwts.; Italy, 26 cwts.; Malta, 10 cwts.; New Zealand, 3,488 cwts.; Port Said, 50 cwts.; Sweden, 6 cwts.; Straits Settlement, 104 cwts.; W. Indies, 5 cwts.

WRITINGS. — To Australia, 2,310 cwts.; Africa, 142 cwts.; Argentine, 102 cwts.; Belgium, 5 cwts.; Cape, 11 cwts.; Canada, 15 cwts.; China, 98 cwts.; France, 161 cwts.; Germany, 2 cwts.; India, 485 cwts.; Italy, 65 cwts.; Japan, 52 cwts.; New Zealand, 3 cwts.; S. Settlements, 62 cwts.; S. America, 36 cwts.; W. Indies, 25 cwts.

OTHER KINDS.—To Australia, 1,963 cwts.; Africa, 177 cwts.; Argentine, 37 cwts.; Belgium, 137 cwts.; B. Guiana, 41 cwts.; Chile, 19 cwts.; Cape, 305 cwts.; Canada, 23 cwts.; China, 89 cwts.; Channel Islands, 52 cwts.; France, 89 cwts.; Germany, 29 cwts.; Gibraltar, 17 cwts.; Holland, 6 cwts.; India, 51 cwts.; Japan, 28 cwts.; Malta, 19 cwts.; N. Zealand, 601 cwts.; Norway, 90 cwts.; Portugal, 13 cwts.; United States, 23 cwts.; W. Indies, 27 cwts.

From Glasgow.

PRINTINGS.—To Canada, 717 cwts.; Gibraltar, 55 cwts.; India, 164 cwts.; United States, 127 cwts.

WRITINGS.—To Canada, 380 cwts.; India, 10 cwts.

OTHER KINDS.—To Canada, 34 cwts.

Digitized by Google

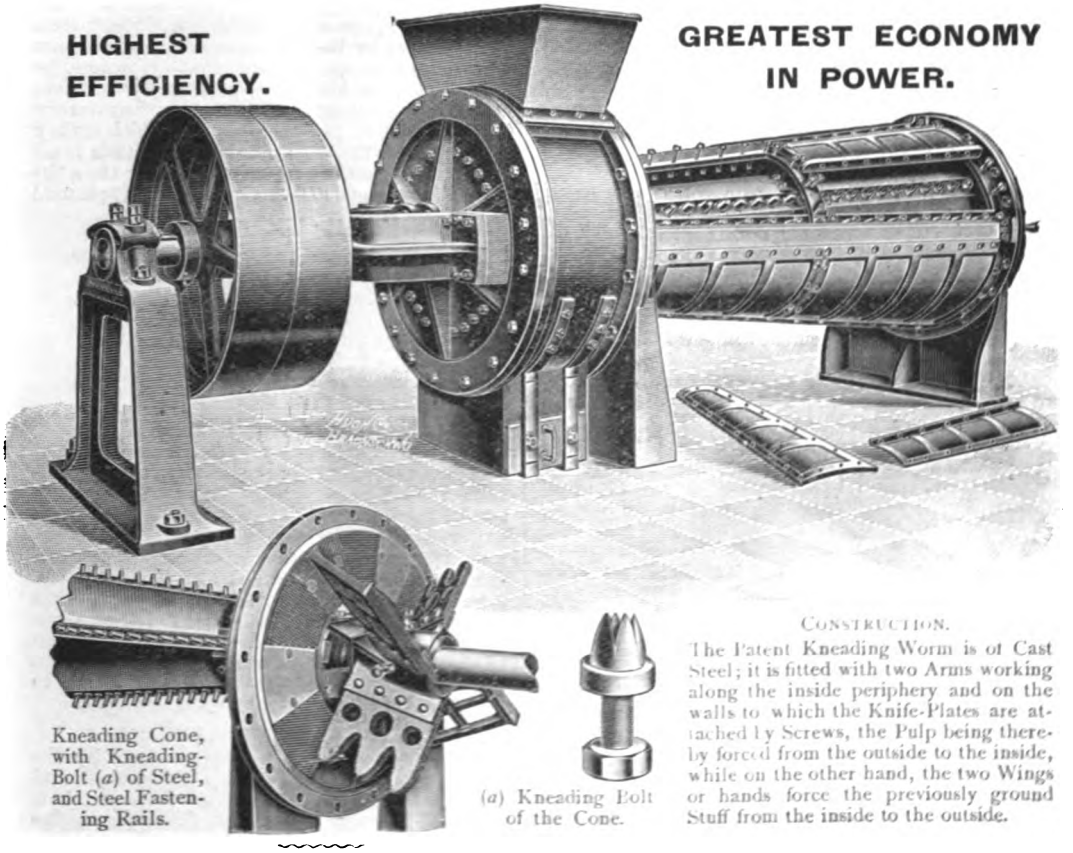
English Patent—No. 18,417. American Patent—No. 730,617.

Robert Dietrich's Kneader

FOR PULPING PAPER STOCK.

HIGHEST EFFICIENCY.

GREATEST ECONOMY IN POWER.



Kneading Cone, with Kneading-Bolt (*a*) of Steel, and Steel Fastening Rails.

(*a*) Kneading Bolt of the Cone.

CONSTRUCTION.

The Patent Kneading Worm is of Cast Steel; it is fitted with two Arms working along the inside periphery and on the walls to which the Knife-Plates are attached by Screws, the Pulp being thereby forced from the outside to the inside, while on the other hand, the two Wings or hands force the previously ground Stuff from the inside to the outside.

ADVANTAGES:—

1.—SIMPLICITY OF OPERATION; GREATEST ECONOMY IN POWER at the LOW SPEED of 90 REVOLUTIONS per minute; Substantial Construction; Stronger than all known Kneaders.

2.—ONLY ONE SHAFT; NO SPUR GEARING REQUIRED; CHOKING-UP BY IRON AND STRING AVOIDED.

3.—Fitted with a STONE, SAND and IRON TRAP underneath the Patent Kneading Worm that draws in the Paper, thus obviating damage to the Kneading Mechanism.

4.—Fitted with STRING, ROPE, and RAG TRAPS, easily cleaned while the machine is running; even without these Traps a portion of string, rope, and rags adheres around the Kneading Worm from which they may easily be removed by merely [illegible] the belt to the loose pulley.

5.—Manufacturers of Wrapping Paper are enabled to use unsorted waste paper or "broken"; other kneaders would be choked by string and rope. Wrapping Paper from waste paper, "broken," straw paper, and cardboard can be made WITHOUT THE USE OF A BEATER.

6.—VERY LARGE FEED AND DELIVERY OPENING and almost UNRESTRICTED CAPACITY for "broken" paper on account of the large Arms and Wings of the Kneading Worm; the Kneading Wings are serrated on all their edges and work against Toothed Steel Knife Plates, hence ready tearing of "broken" paper, and even cardboard and paper tubes may be worked up by the machine.

ROBT. DIETRICH, Merseburg, GERMANY.

Digitized by Google

PRINTING, Stationery, and Allied Trades EXHIBITION.

A [illegible] Show at Islington.

[illegible]

which he had been supported. The idea of holding the Exhibition emanated from his visit to the wonderful exhibition at Dusseldorf two or three years ago; he suggested it to Mr. Robert Hilton, and it was largely due to him that it had assumed the propo[rtions] it had.

On the motion of Mr. Pollen(?) the health of the Chairman was drunk with much enthusiasm. Mr. Pollen(?), in the course of his remarks, expressed his belief that the British printing trade had woke up during the past five or six years. There was no doubt, he said, that the American printing world had been [illegible] ahead of us, but if the [illegible] would [illegible] British firms were now making machines better than the Americans were able to give us. [illegible]

THE EXHIBITS.

[illegible]

by Messrs. Wright and Co., 97, Queen Victoria-street, E.C. Drawing papers and boards, cover papers, etc., make up an interesting show.

The Osnabrucker Papier-Waaren-Fabrik, 301, High Holborn, W.C., show a selection of their high-class menu and guest cards, ball programmes, calendars, stationery boxes, post-cards, and fancy papers.

Manufacturing stationers will find a fine display of glues, gelatines, etc., at the stall of Mr. H. E. Kershaw, 121-139, Curtain-road, E.C.

In the matter of post-cards there is a very extensive exhibit by Messrs. Raphael Tuck, Messrs. Wrench, and other prominent firms.

ELECRIC MOTORS, GAS ENGINES, ETC.

Manufacturers generally will be interested in the exhibits that fall under the above heading.

Motors may be seen driving printing machinery, fans, hoists, etc., the firms represented being the Electro Motor and Dynamo Co., Electromotors, Ltd., F. A. Glover and Co., Ltd., F. W. Potter and Co., and the Union Electric Co., Ltd. The electric pulley block shown by the Electromotor and Dynamo Co., of 15, Gray's-inn-road, Holborn, W.C., has attached to it a reel of paper, and the ease of handling is well demonstrated.

Gas engines, largely used in printing offices, are, owing to their enormous power, being adopted in large works. Exhibits are made by Kynoch, Ltd., Bilbie, Hobson and Co., Crossley Bros., Ltd., Thos. Glover and Co., Ltd., the National Gas Co., Ltd., and Tangyes, Ltd., the latter firm also showing "suction" producer, pump, and other appliances.

PRINTING MACHINERY, APPLIANCES, ETC.

Typography and typefounding, lithography and metallography, mechanical process engraving and colour printing, and the latest typewriting machines—all these things, and many besides, are represented in the show. The exhibition affords a striking object-lesson in the modern developments and improvements connected with the printing world, and to the uninitiated an inspection of such things as a Linotype machine, a Monotype, and a new machine capable, it is said, of dealing with type of any fount, cannot fail to prove interesting. The largest space in the building is assigned to a "model printing office" set up by Messrs. John Haddon, with the view to producing in the sight of visitors a daily newspaper containing a record of the doings at the Islington hall. Not to be outdone, Messrs. Carl Hentschel, who are among the exhibitors, have contrived to turn the occasion to a light-hearted account by the production of a "sheet" conceived in an irresponsibly humorous vein. It would take too much space to particularise the various exhibits in this journal, but paper trade visitors will doubtless be interested in the stand of Mr. Ferd. Emil Jagenberg, of Dusseldorf, who shows machines for box-making, slitting and rewinding paper, lining boards, etc.; also in the various sheet feed presses, the "Harris" being shown by the Anglo-American Inventions Syndicate, Cursitor-street, E.C., and the "Vickery" at the stall of Messrs. R. Cundall and Sons, Ltd., of Shipley; numbering machines, etc., by Mr. Samuel Insull, sen., 34, Queen-street, E.C.; guillotines, etc., by Messrs. Kampe and Co., 76, High Holborn, E.C.; whitewashing, limewashing and painting machines, by Messrs. Wallach Bros., 57, Gracechurch-street, E.C.

PETER SPENCE & SONS, LTD.
MANCHESTER.

PURE CRYSTAL ALUM
Used in Sizing the FINEST PAPERS.
Highest-class SULPHATE OF ALUMINA.
ALSO SOLE MANUFACTURERS OF THE WELL-KNOWN ALUMINOFERRIC

"Satinite" A PERFECT PAPER HARDENING.
Imparts Hardness, Colour and Finish.
Saves 20 to 30 per cent. of Starch.
SUPPLIED TO ALL THE LARGE MILLS AT HOME AND ABROAD.
Sole Manufacturers and Patentees: THE SATINITE CO., WEST BANK, WIDNES.
The Best and Purest Sulphate of Alumina also supplied.

Digitized by Google

WORLD'S PAPER TRADE REVIEW.
Office: 58, Shoe Lane, E.C.

TRADE NOTES.

KELLNER-PARTINGTON PAPER PULP CO., LTD.—At a meeting of the directors of the Kellner-Partington Paper Pulp Co., Ltd., on Tuesday, it was decided to pay an interim dividend for the half-year ended March 31st, 1904, of 7½ per cent. (being at the rate of 15 per cent. per annum).

MR. THILLINGLAW, of the Ellangowan Paper Mills, Milngavie, near Glasgow, has, we understand, been appointed manager at the works of McMurray's Royal Paper Mills, Ltd., Wandsworth.

THE DICKINSON CENTENARY.—The *Hertfordshire and Hemel Hempstead Gazette* is to be congratulated upon its excellent supplement devoted to the Dickinson Centenary. It is printed on coated paper, in chocolate ink, and is certainly above the usual standard of productions of local papers. Portraits are given of Mr. John Dickinson, Sir John Evans, K.C.B., F.R.S., and Mr. Lewis Evans, and views of Croxley, Apsley, Home Park, and Nash Mills. Illustrations are given of the Dickinson Fire Brigade, Dickinson Silver Prize Band, and also of the London premises at Old Bailey. A very interesting history of the firm is published, and the generosity of the directors and shareholders referred to in celebration of the Centenary.

IMPERIAL PAPER MILLS.—Mr. C. W. Rantoul, general manager of the Imperial Paper Mills, Sturgeon Falls, in a recent interview, is reported to have said:—"The output of our mills, which is of the best quality of news paper, is shipped to Australia, England, and the States. In the company's yard are 12,000 cords of spruce wood for the manufacture of the pulp, and in addition to that we have taken out 15,000 cords this winter, which will be driven down the river in due course. It is very likely that the coming season will see a great increase in the town, owing to the fact that the company are planning to more than double the paper mill plant and erect a sulphite plant for the manufacture of sulphite fibre."

FIBRE TILES.—The Canadian Commercial Agent for New South Wales, Queensland, New Zealand, writes:—"In the cities, what is known in the trade as French tile, is used for roofing. I have had an enquiry whether a tile is not, or could not be, made of paper pulp that would take the place of the French tile. It may be that, if consideration is given to it, such a tile could be produced by a process somewhat akin to that used in making indurated fibreware. The objection to the French tile is its weight, its tendency to absorb moisture, thus increasing its original weight and creating a growth of vegetation that speedily discolours it. A fibre tile would be much lighter, be moisture-proof, preserve its colour better, be less liable to break than either slate or tile, suffer less from expansion and contractions through variations in temperature, and be free from the rattle in a storm characteristic of metal. Could a fibre tile be produced at a moderate cost there would be a large demand for it in Australia."

MR. A. M. WARD, manager of the Riverside Mills of the London Paper Mills Co., Ltd., Dartford, has been admitted an associate member of the Institute of Mechanical Engineers.

THE London office of Messrs. Thomas Hardman and Son, Ltd., felt manufacturers, Bury, has been removed from 145, Queen Victoria-street, to 11, Wardrobe-chambers, Queen Victoria-street, E.C.

ST. LOUIS EXHIBITION.—With a great flourish of trumpets, the World's Fair at St. Louis was opened on Saturday last by the President of the Republic, who pressed a golden button at Washington, which was the signal for the release of the national flags over the exhibition buildings. Nearly £10,000,000 have been spent on this great enterprise. It covers more space than any preceding World's Fair, and is undoubtedly a very fine and representative show, fully worthy of America. According to one description, "It is a poem of human achievement, idyllic in beauty, epic in action, didactic in the new ideals it brings to the world." The main portion of the Exposition grounds is occupied by the ten large exhibit palaces, including those of the liberal arts, mines, and metallurgy, manufactures, education, agriculture and horticulture. More foreign nations have joined in the assemblage of displays than ever before took part in similar enterprise.

MR. JOHN PICKUP HAWORTH, of Spring Vale Paper Mills, Darwen, left on Saturday last to visit the St. Louis Exhibition.

THE May number of the *Strand Magazine* contains, as usual, a number of attractive features, notably "The Adventure of the Six Napoleons," one of the Sherlock Holmes series, by Sir A. Conan Doyle; a further chapter of "The Memoirs of Sarah Bernhardt," relating how the famous actress became destined for the stage; "Off the Track in London," by George R. Sims; and "Dialstone Lane" (serial), by W. W. Jacobs. An instructive article is "The Size of the World's Cities," by Arthur T. Dolling, and amongst the other contents may be mentioned "The Naval War Game and How it is Played," by Angus Sherlock.—The *Sunday Strand*, a most popular monthly, contains many short stories, as well as serials, by well-known writers. The article on "The Drink Trade as Employer," by G. Gale Thomas, gives the information that one-third of the beer drunk in the United Kingdom is brewed by only twenty brewers.—A mass of interesting reading matter, brightly illustrated, is presented in this month's *Captain*, a delightful companion to both young and old, and to lovers of sport in particular.

ADVERTISE in this paper! It pays!!

Digitized by Google

F. C. HUYCK & SONS'
Felts and Jackets,

Manufactured at Albany, N.Y., U.S.A.

FELTS and JACKETS for HIGH SPEED, used on the widest and fastest running paper machines in the United States and Canada.

STRONG, FINE CYLINDER FELTS which give the Highest Finish to the best grade boards and cylinder machine papers.

SPECIAL STRONG OPEN FELTS for Mechanical and Chemical Pulp Machines.

Sole Agents for Great Britain and Ireland:—

W. G. TAYLOR & Co., Ltd.,
LONDON, MANCHESTER, & EDINBURGH.

STRAW PULP.

The VEREINIGTE STROHSTOFF-FABRIKEN
COSWIG-SAXONY

Recommend their First-class Bleached Dry STRAW PULP. Unequalled in Whiteness and Purity. Strong and Felty. Warranted free from clays and colours. Used by Leading Paper Mills in Europe and U.S.A. Daily production 60 Tons Dry STRAW PULP. Exposition Universelle de Paris, 1900, "GRAND PRIX." *Sole Agents for*—

Scotland, Ireland, and the Newcastle District of England: ROBERT H. HAY & CO., 2, ST. ANDREW SQUARE, EDINBURGH.
England (except Newcastle District): ... ... BECKER & CO., 64, CANNON STREET, LONDON, E.C.

SKOTSELV CELLULOSEFABRIK,

SKOTSELVEN — NORWAY.

EASY-BLEACHING SULPHITE PULP.

Sole Agents for the United Kingdom:

Messrs. BECKER & Co., 64, Cannon Street, London, E.C.

WILLIAM MAKIN & SONS,

Attercliffe Steel Works, Sheffield, England.

(ESTABLISHED A.D. 1736).

PAPERMAKERS' STEEL and BRONZE TOOLS.

Illustrated Catalogues and Price Lists, in French and English, on Demand.

Remington Typewriter.

THE BUSINESS BUILDER.

(Write for Particulars).

100, GRACECHURCH STREET, LONDON, E.C.
263, OXFORD STREET, LONDON, W.

Digitized by Google

Canadian Imports of Paper.

The following official returns—the latest available—show Canadian imports of paper and manufactures of paper for the month of January and the first seven months (July-January) of the fiscal year, together with the figures for corresponding periods of the previous year:—

JANUARY IMPORTS.

From	1903. Dols.	1904. Dols.
United States	109,904	118,262
Great Britain	26,335	32,588
Other countries	4,417	13,310
	140,656	164,160

JULY-JANUARY IMPORTS.

From	1902-03. Dols.	1903-04. Dols.
United States	821,134	964,901
Great Britain	237,507	269,565
Other countries	74,887	93,012
	1,133,528	1,327,478

Two New Paper Machines.

The big Belgian paper mills at Saventhem have decided upon the erection of two additional paper machines.

These mills are now working with four machines. It is expected to increase production by 50 per cent. with the new ones.

Stocks and Shares.

The following report is supplied by Mr. F. D. Dean, stock and share broker, 36, Corporation-street, Manchester. (Telegrams: "Fredean, Manchester;" 'Phone, No. 2180).

Paper Shares continue to be almost a neglected quantity, and prices as a consequence vary very little. The undertone for the principal mills is still of a steady nature, with but few sellers of shares. Bergvik, Ltd., announce 16s. dividend, being the same as for last year this time, but otherwise the deferred are unchanged. Kellner-Partington have been wanted, and close up ¼ at 9⅜, whilst the Debentures have put on ½ at 103. Star continue favourites and have again moved upwards to 8¼ middle for ordinary and 6¼ for the preference, £3 paid; the dividends are due in course of a few weeks.

Business in Chemical Shares has been much quieter during the past week, though prices are tending towards better levels again, after last week's drooping. Brunner Monds are the turn harder again at 5⅛ buyers, but the "new" shares are unchanged at round 52s.; the preference show a rise of ⅛ at 17½. Salt Union ordinary are much better on the report of better prospects of the salt trade, and the ordinary have moved up 2s. 3d. to 14s., and the preference ⅜ to 4⅛ middle. United Alkali have also been better, though not so pronounced as Salts, and the ordinary show a gain of 1s. 3d. at 23s., and the preference ¼ at 7⅜ buyers.

PAPER, &c.

Amount Paid.	Nominal Amount.	Name of Company.	Dividend last half-year.	Prices May 4.
			%	
1	1	Annandale & Son ord.	10	24/6—25/6
5	5	do. do. pref.	5	5¼—5⅜
100	100	Bergvik Co., 4½% debs. Nos. 1—3,000	4½	98—100
10	10	do. do. deferred	16	11⅝—12⅛ x.d
10	10	do. do. 6% cum. pref	6	10⅝—11¼
4	5	Burnley Paper Co.	12½	7⅛—7⅜
7	7	Bury Paper, ord.	nil	6⅞—7⅛
7	7	do. 6% pref.	nil	7—7⅛
5	5	Darwen Paper Mill Co. "A"	10	10⅛—10⅜
3½	5	do. do. "B"	10	7⅞—8¼
1	1	do. "C" issued at £1 pm.	10	2—2⅛
10	10	E. Lancashire Paper Co	10	14⅜—15
10	10	do. do. 6% pref.	10	14¾—15
5	5	do. do. bonus	5	4⅛—4¼
3	5	Kellner-Partington Co.	15	9⅛—9⅜
5	5	do. do.	15	16—16½
100	100	do. do. debs. (red. 1914)	4½	102½—103½
5	5	N. of Ireland Paper Co.	10	6⅞—7⅛
5	5	Olive & Partington 5% pref.	5	5⅛—5⅜
7	10	Olive Brothers	nil	5⅛—6⅛
10	10	do. do. fully paid	nil	8⅞—9⅛
5	3	do. do. pref.	10	4—4⅛
1	1	Owen, T. & Co. 6% pref.	6	17/0—18/0
100	100	do. do. debs.	5	54—56
5	5	Peebles (A. M.) & Son	4	3⅜—3⅝
5	5	do. 5% cum. pref.	5	4⅛—4⅜
100	Stock	do. 4½% deb.	4½	96—100
3	5	Ramsbottom Paper Co.	10	5⅜—5⅝
1	1	do. do. cum. pref	5	21/0—22/0
4½	5	Roach Bridge Paper Co.	10	5⅞—6⅛
5	5	Star Paper Co.	10	8⅛—8⅜ c.d.
3	5	do. do. cum. pref.	10	6⅛—6⅜ c.d.
100	100	do. do. deb. stock	4½	99—100
10	10	Spicer Brothers cum. pref.	5	9⅝—10
10	10	Waterlow & Sons non.-cum. def.	12½	18⅛—19⅛
		do. do. non.-cum pref.	4	12⅛—12¾
10	10	do. do. cum. pref.	3½	8—8⅛

CHEMICALS, &c.

1	1	Brunner, Mond & Co.	30	5⅛—5⅜
10/	1	do. do; "New"	30	2⅛—2⅜
10	10	do. do. 7% cum. pref	7	17⅛—17⅜
1	1	Cassner-Kellner Alkali Co.	nil*	14 3—14 9
100	Stock	do. do. 4½% deb.	4½	50—52
5	5	Clayton Aniline Ord.	5	2⅞—3⅛
5	5	do. do. cum. pref.	nil*	4—4⅛
1	1	Electrolytic Alkali ord.	nil	5.0—5.6
1	1	do. do. 7% pref.	nil	11/6—12/6
5	5	Langdale's Chemical Co. Ltd.	2½	25/6—26/6
9	10	Lawes Chemical ord.	4½ †	3¼—3⅜
10	10	do. do. pref.	7	9⅛—10
4	4	Salt Union ord.	nil	13/9—14/3
6	6	do. 7% non. cum. pref	6/-	4—4⅛
100	Stock	do. 1st mort. deb.	4½	85⅛—85⅝
100	"	do. "B" mort. deb.	4½	82—84
10	10	Steiner (F.) & Co. ord.	*nil	6—7
10	10	do. do. cum. pref.	5	7⅛—7⅜
100	Stock	do. do. deb. stock (red. 1912)	4	84½—85½
10	10	United Alkali Co.	nil	22/9—23/3
10	10	do. do. cum. pref.	7	7⅜—7⅞
100	Stock	do. mort. deb. (red. after 1901)	5	97½—98
1	1	United Indigo & Chemical	nil	3/0—3/6
1	1	do. do. 5% cum. pref.	5%	8/6—9/6

* Interim † For year. ‡ Div. to 31/12/02.

Digitized by Google

R. R. WHITEHEAD & BROS. LTD.,

TELEPHONE: 16 Mossley.

TELEGRAPHIC ADDRESS: "Whiteheads, Greenfield Yorkshire"

Royal George Mills,

GREENFIELD, NEAR OLDHAM.

MANUFACTURERS OF EVERY DESCRIPTION OF

FELTS

FOR PAPER AND PULP MILLS.

Telegraphic Address: "APSLEY, LIVERPOOL." Telephone: 382.

MAKIN & BANCROFT,

Codes { A B C, 4th Edition, Liebers. Private.

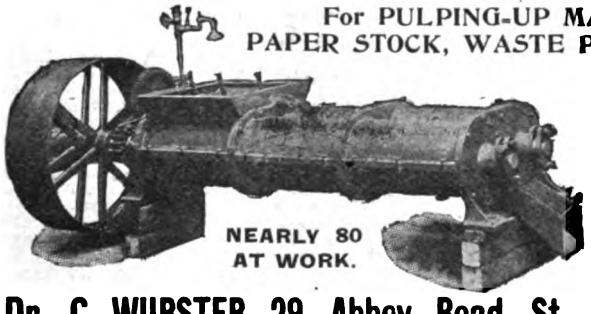
Apsley Buildings, 4, Old Hall Street, Liverpool.

SOLE BRITISH AGENTS FOR THE SAULT STE. MARIE PULP & PAPER Co., ONTARIO, CANADA.

Direct Importers of All Papermakers' Materials.

Dr. C. Wurster's Patented PULPING MACHINES & KNEADERS

For PULPING-UP MACHINE "BROKE," OLD PAPER STOCK, WASTE PAPERS, DRY WOOD PULP, &c.



These Machines, with the same power, do from TWO to FOUR TIMES the WORK of STONES, without Shortening, Affecting, Creasing, or Wetting the Fibre in any way, or Changing the Colour or the Sizing.

Beaters not Required in making Boards from Old Paper Stock.

Can be used for Kneading Clay and other Fillers, as well as for Kneading Dry Bleaching Powders instead of the Bleaching Mill.

Dr. C. WURSTER, 29, Abbey Road, St. John's Wood, LONDON, N.W.

JAMES KENYON and SON,

DERBY STREET MILLS, BURY, LANCASHIRE,

ALL FELTS for Papermakers.

Telegrams: "*KENYON, BURY.*"

Telegraphic Addresses:— "BERNER LONDON." "BERNER, MANCHESTER."

BERNER & NIELSEN,

London Telephone:— No. 248 AVENUE.

61 & 62, Gracechurch Street, London, E.C.,

And at 17, Exchange Buildings, St. Mary's Gate, Manchester.

WOOD PULP OF ALL KINDS

FOR PAPERMAKING.

Digitized by Google

RUSSIA.

QUITE a paper famine is said to exist just now in Siberia. Paper has always been more or less scarce in that part of the world, but the difficulty of procuring it has of late much increased, and prices have gone up to a great extent.

THE TATAROW PAPER MILLS, in Mstera (Government Wladimir), has suspended payment. The liabilities are said to be about one million roubles.

FRANCE.

A BROWN-PARSONS STEAM TURBINE of 600-h.p. was recently installed in the two-machine board mill of MM. Haemers and van den Bavière, at Gravelines (Nord). The success of the introduction of this new power furnishing appliance into the establishment in question has been such that the proprietors of another two-machine mill in the same district (MM. Dalle freres et Lecomte, of Bousbecque) have just given the makers, the Electro Mechanical Co., an order for a 2,600-h.p. turbine of similar construction.

GERMANY.

AT a recent meeting of the Berlin Paper Wholesale Dealers alterations were made to some of the rules. To effectively represent the interests of the trade it was urged that all dealers should become members of the Association.

MR. NEDLICH, of Eisenberg, Palatinate, has acquired the Papiermuhle Gressmuhle in Achern.

THE death is announced of Mr. Gustav Poensgen, of Dusseldorf. He was Privy Councillor of Commerce and chairman of the Committee of Inspection of the Rheinische Actien Gesellschaft fur Papier Fabrikation in Neuss o/Rhine.

DESTRUCTIVE FIRES recently occurred at the pulp board factory in Kammerswalde, Saxony, belonging to Mr. A. Obenauf, and at Mr. Engelhardt's pulp factory in Gabrielahütten, near Olbernhau, the latter being entirely destroyed.

UNITED STATES.

PAPER FROM COTTON STALKS.—Messrs. Montag Bros., of Atlanta, Ga., are reported to be successfully using cotton stalks in the manufacture of paper, samples of which have recently been obtained by the Agricultural Department, which for some time past has been investigating the subject.

THE Smith Improved Paper Machinery Co., of Bellows Falls, Vt., have recently received orders for the Smith diagonal screen plates for mills in Germany and Japan. It is claimed that tests show that these diagonal screens outlast any other style of screen two to one, and do a third more work in a given time. The Smith improved calender feed is also meeting with considerable favour, owing to its efficiency.

THE annual convention of the International Brotherhood of Papermakers will be held at Niagara Falls, N.Y., on May 9th. There will undoubtedly be some important questions brought up for consideration.

PROGRESSIVE PULP AND PAPER CO., PLATTSBURG, N.Y.—Capital stock, 210,000 dols. Directors, Messrs. J. J. Cunningham, W. J. Gallagher and G. M. Ingalsbe, of Sandy Hill, and A. R. Wing and O. H. Moore, of Fort Edward.

GAZETTE.

ENGLAND and WALES.

PARTNERSHIP DISSOLVED.

CROFTS, J. E. AND SON, box manufacturers, Wellington-street, Leicester; debts by J. E. Crofts, by whom the business will in future be carried on. April 25th.

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDERS

PEACH, C. N., trading as C. Peach and Co., 174, Normanton-road, Derby, stationer. Date of order and of adjudication order April 25th, made on debtor's own petition. First meeting of creditors May 7th, noon, at the official receiver's office, 47, Full-street, Derby. Public examination of debtor, May 10th, 11 a.m., at the Court House, 20, St. Peters' Church Yard, Derby.

FILMER, W. G., C. H., AND H. B., now or lately trading as Filmer Bros. and Holmes, 158, Whitecross-street, London, E.C., box manufacturers. Date of order, April 29th, made on a creditor's petition. First meeting, May 12th, 11 a.m., and examination, June 16th, noon, both at Bankruptcy-buildings, Carey-street W.C.

FIRST MEETINGS AND PUBLIC EXAMINATIONS.

JONES AND STAINFORTH, 12 and 24, Garden-street, 30½, Brook-street, and the Paragon Works, Church-street, Hull, printers and paper bag merchants. First meeting, May 11th, 11 a.m., at the official receiver's office, Trinity House-lane, Hull. Examination, May 30th, at the Court House, Town Hall, Hull.

CHESTON, C. F., 40, The Bridge, Taunton, late Wellington, Somerset, stationer. First meeting, May 7th, 11.30 a.m., at the official receiver's office, 55, Hammet-street, Taunton. Examination, May 24th, 2.30 p.m., at the Guildhall, Taunton. Date of adjudication order, April 25th.

NOTICE OF INTENDED DIVIDEND.

DAVIS, H. L., 159, Blackfriars-road, London, S.E., printer and publisher. Claims by May 6th to C. F. Oughton, Moorgate-street-chambers, E.C.

NOTICE OF DIVIDEND.

ALLEN, R. H., trading as Allen, Godfrey and Co., 8 and 9, Gray's-inn-passage, Red Lion-street, London, W.C., printer and advertising contractor. First dividend of 4s., May 2nd, at the office of the trustee, G. White, 14, Old Jewry-chambers, E.C.

APPOINTMENT OF TRUSTEE.

SEALE, A. A., 7, Elm-grove, Southsea, Hants, stationer and bookseller. Trustee, A. Willmott, 1, Old Jewry-chambers, London, E.C. Appointed Apr 30th.

NOTICE OF RELEASE OF TRUSTEE.

GIVEN, W., 6, Selwyn-parade, Kew-road, Richmond, Surrey, printer, stationer and bookbinder. Trustee, A. Mackintosh, 24, Railway-approach, London-bridge, S.E. Released March 21st.

Digitized by Google

SPECIAL PREPAID ADVERTISEMENTS

IT IS IMPORTANT that Advertisements under any of the Headings mentioned below should reach us by the first post on Thursday to insure insertion the following day.

SITUATIONS WANTED—Charges for advertisements under this heading are One Shilling for twenty-four words, and One Penny per word after. Minimum charge One Shilling. Three Insertions are given for the price of two. Cash to be sent with Order.

SITUATIONS VACANT, BUSINESSES WANTED or FOR DISPOSAL, MILLS WANTED or TO LET, MACHINERY, and MISCELLANEOUS—Charges for Advertisements of the above class are Three Shillings for fifty words or under; One Shilling extra for every line or portion after. Ten words to be reckoned for each line

LEGAL & FINANCIAL ANNOUNCEMENTS, TENDERS. SALES BY AUCTION, &c.—One Shilling per line.

ADVERTISERS, by paying an extra fee of Sixpence, can have the replies addressed to the WORLD'S PAPER TRADE REVIEW Office under a number, and such replies will then be forwarded post free.

PAYMENTS must be made in advance, except where the advertiser has a running account, in which case the cost, can be debited thereto.

CHEQUES and Post Office Orders to be Crossed and made payable to W. JOHN STONHILL & CO.

OFFICES—58, SHOE LANE, LONDON, E.C

Situations Vacant.

BEATERMAN Wanted for Mill making Papers from Wood Fibre; must be well up in Colours. —State wages required, age, and experience to No. 9,439, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9439

Situations Wanted.

BLOTTINGS.—A Gentleman, with ten years' practical experience in a Blotting Mill, requires employment; can initiate and superintend the manufacture from start to finish; buying and selling. —Address, No. 9,437, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9437

CLERK, German (23), some knowledge of the Paper Business, requires Situation; highest references. The first few months without remuneration.—Address, No. 9,433, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9433

FINISHER, age 24, seeks Situation; used to S.C. Printings, Browns, Blottings, etc.; capable of taking charge; good references.—Write, stating wages, H. Dyer, 3, Anglo-cottages, Purfleet, Essex. 9436

PAPER MILL MANAGER wants Re-engagement; thoroughly experienced in Ropes, Browns, Bag Papers, Glazed Packing, Shops, Paper made all from Wood; strictly steady, and excellent testimonials.—Address, No 9,428, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9428

PRACTICAL FOREMAN seeks Situation; experienced in Ropes, Shops, all classes of Browns; at present in small Mill.—Address, No. 9,416, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9416

PRACTICAL MANAGER seeks Re-engagement; experienced in Printings, S. C. Whites, Creams, Cartridges, Coloured Printings, Sulphite Papers, the Preparing in every Department; first-class testimonials. —Address, No. 9,427, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9427

PRACTICAL Paper Mill Foreman requires Situation; M.G. Caps, Manillas, Casings, Drabs, Cutlery, Imitation Parchment, Hosiery, High-class, Frictioned Glazed; capable of taking entire charge; steady; testimonials.—Address, No. 9,429, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9429

SUPER-CALENDERMAN wants change; used to Highly Glazed and Writing Papers; first-class reference; 12 years present situation.—Address, No. 9,443, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9443

TO PAPERMAKERS. — Practical Machineman, with family of workers, seeks Situation as Working Foreman, Night Foreman, or Machineman; Browns, Shops, Caps, Casings; abstainer; reliable.—Joseph Allen, opposite Church, Ecclesfield, Sheffield. 9435

YOUNG MAN seeks a place as Dryer, Cutter, or Reelerman; reference given.—Apply, Edgar Ellis, Bisham, near Great Marlow, Bucks. 9442

Machinery.

FOR SALE, Several Second-hand Dandy Rolls, equal to New.—For full particulars and sizes, write to T. J. MARSHALL & Co., Campbell Works, Stoke Newington, London, N.

Also Several Second-hand Red Rubber Deckle Straps.

If you WANT A DANDY ROLL QUICKLY, Telegraph "DANDYROLLS, LONDON."

Telephone Number: 79 "Dalston." 6288

WANTED, large Washing Engine and Nuttall Chopper, in good condition.—Address, No. 9,432, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, E.C. 9432

Miscellaneous.

JOHN FULTON & CO., Engravers of Rollers for Printing Wall Papers, etc., also of Rollers for Embossing all kinds of Paper.—Knowsley Street Engraving Works, Manchester.

MILLS FOR SALE.—By private treaty as a current going concern, Freehold and Leasehold Mills, with good water and steam power. The capacity of these Mills together is 30 tons per week, and will be sold at a low price, offering a favourable opportunity for a moderate amount of capital.—For full particulars, address No. 9,440, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9440

FOR SALE.

30 BRASS TUBE ROLLS, $2\frac{7}{16}$-in., and six $2\frac{1}{16}$-in. by $74\frac{1}{2}$-in. long on face.
8 BRASS LEADING ROLLS, from 69-in. to 77-in. on face by $3\frac{1}{2}$-in. to 5-in. diameter.
1 BRASS COUCH ROLL, 12-in. diameter by 75-in. long on face.
4 BRASS ROLLS, 5-in., and sixteen 3-in. by 14 W.G. by 100-in. long on face.
8 COPPER ROLLS, 7-in. by $\frac{1}{4}$-in. by $82\frac{1}{2}$ in. long on face.
6 COPPER ROLLS, 7-in. by $\frac{1}{4}$-in. by 92-in. long on face.
2 COPPER ROLLS, 7-in. by $\frac{1}{4}$-in., perforated, by 92-in long on face.

Apply to BERTRAMS LIMITED, (2)
St. Katherine's Works, Sciennes, EDINBURGH.

"TASCHEN-HILFSBUCH unentbehrlicher WOERTER DES PAPIERFACHS."

Technical Dictionary of Paper Trade Terms, in German and English, by E. A. HOPKINS.

OCTAVO, POST FREE 9d.

W. JOHN STONHILL & Co., 58, Shoe Lane, London, E.C.

Digitized by Google

ZELLSTOFFFABRIK TILSIT,
TILSIT, GERMANY.

Mitscherlich Sulphite Pulps.
HARD STRONG and
EASY BLEACHING QUALITIES.

Sole Agents in United Kingdom:—
ANDREWS & Co., LTD.,
91, Queen Victoria Street,
LONDON, E.C.

WILLIAM VARCOE
REGISTERED
AND SONS,
STOKE-ON-TRENT,
CHINA CLAYS
For PAPER-MAKERS.

PUBLISHED EVERY THURSDAY —Price 2d.

An Excellent Medium
For Papermakers to Keep
Their Makes Before Buyers

NEXT EXPORT ISSUE IN JUNE.

Advertisement Rates on application to—
W. JOHN STONHILL & CO.,
58, SHOE LANE, LONDON, E.C.

Annual Subscription (post free):—
United Kingdom, 10s.; Foreign and Colonial, 12s.

The World's Paper Trade Review
A WEEKLY JOURNAL FOR PAPER MAKERS & ENGINEERS.
ESTABLISHED 1879.
No 1220 OLD SERIES
No. 1165 NEW WEEKLY SERIES

THE LEADING JOURNAL
For the British Paper & Pulp Industries.

Printed and Published EVERY FRIDAY
by W. JOHN STONHILL & CO.,
at 58, Shoe Lane, London, E.C.

Subscription: £1 per Annum, post free to any part of the world.

REPRESENTATIVE FOR THE LANCASHIRE, YORKSHIRE, AND MIDLAND DISTRICTS:
MR. THOMAS FOSTER,
4, BOWKER STREET,
HIGHER BROUGHTON, MANCHESTER.

FRIDAY, MAY 6, 1904.

PRINCIPAL CONTENTS.

	PAGE
Specific Gravity or Density of Paper	1
French Papermakers' Association	2
Technological Examinations, 1904	3
Temperley's Syphon Mould	6
The American "Paper Trust"	6
Paper Boards	8
American Coated Paper	10
Manufacture of Sulphurous Acid	10
Cay-gio, or Paper Tree	10
Exports of British Paper	10
Printing, Stationery and Allied Trades' Exhibition	12
Trade Notes	14
Canadian Imports of Paper	16
Two New Papermaking Machines for a Belgian Mill	16
Stocks and Shares	16
Our Foreign Post	18
Gazette	18
Leaderettes	20
Market Reports	22
Wood Pulp Industry	25
New Patents	26
British Imports of Chemical and Mechanical Wood Pulp	27
Current Prices of Papermaking Materials	29
American Imports of Paper, Paper Stock, Chemicals, Etc.	32
British Imports of Foreign Paper, Etc.	34
Mr. J. M. Murphy	36
Tariff Charges and Customs Regulations	38
Daily Papers on Ocean Liners	39
General News	40

FOR LIST OF ADVERTISERS
See Page 23.

Selling Prices of Paper.

SEVERAL Continental countries have had under consideration the question of advancing the selling prices of paper. With that object in view, papermakers in France have held several meetings of late, at which it was pointed out that the demand for news

Digitized by Google

has sent up the value of wood pulp to the extent of 20 per cent., and as other materials have also advanced, an increase in paper prices was necessary. The Association of French Papermakers recommended that its members advise buyers of the conditions of the market, and the necessity of an advance which, in the first instance, will probably not be less than 15 per cent., and later on may be increased.

* * *

The British Market and "Under-Cutting."

WHILST papermakers in France appear to work together to secure better prices for their products, it is to be deplored that in the United Kingdom there is a lack of cohesion amongst manufacturers. At the present time complaints are not so much against foreign competition, but on account of the weakness displayed by certain home makers who seem anxious to obtain orders by "under-cutting" in the way of allowing bigger discounts than their competitors.

* * *

Tub-Sized Papers.

ONE of the leading makers of tub-sized papers, in discussing prices the other day, strongly condemned the practice of some mills who were willing to accept for their makes prices practically dictated by buyers. He said there was not the slightest necessity to encourage low prices. "I have not," he remarked, "had to seek an order for two years, and have declined offers that show any reduction compared with fixed prices." Unfortunately, instances are not wanting where buyers work one maker against the other, with the sole object of putting down prices, and, therefore, it behoves makers to show a firm front so as to check the practice. It has been suggested that mills should follow the example of Scottish makers and send a return to the Papermakers' Association every month, showing the number of tons ordered, and the distribution of the information to the mills interested would show if a "dead set" was being made against any particular maker.

* * *

The Production of Small Samples of Papers, Bleached Pulps, Etc.

ON another page we give a description of a syphon mould introduced by Mr. Temperley, of the Municipal Technical School, Bury. The apparatus will be found invaluable for the production of small samples of paper, bleached pulp, etc. The principle of the mould is simplicity itself:—It is first primed with water covering the wire, the pulp is emptied in, shaken to felt the fibres, the water drains away sucking air through the film of paper, which is lifted off, squeezed and dried. The price of the mould is nominal (7s. 6d.), whilst samples have proved of great commercial value in buying and selling coloured papers, bleached pulps, etc.

* * *

An Object Lesson.

AN amusing and instructive case may be mentioned in connection with one of Temperley's moulds used by the River Pollution authorities against a well-known Yorkshire papermaker. The latter was much disturbed owing to the complaints as to pollution, and professed to be unable to understand the analytical report on his unsatisfactory effluent. Eventually the Pollution Committee gave him an object lesson by making and sending him two small sheets of paper made on a very fine mesh from his effluent, along with a practical statement showing the amount of fibre run away during the week. The papermaker was at once interested, he saw that money was being wasted, and at once invested in a well-known stuff economiser advertised in these pages. The satisfactory result has been achieved of increasing the mill's yield of paper, and at the same time avoiding further pollution complaints.

* * *

The Taxation of Machinery.

WE have been favoured with copies of correspondence between the Machinery Users' Association and the Reading Union Assessment Committee, and also between the Association and the Rugby Assessment Committee. When it is remembered that local rates in many districts have now reached upwards of 8s., and in some instances 10s., in the £, the practice of committees to rate tenants' machines and tools, as shown by the correspondence, is a matter of considerable interest to manufacturers, as it applies to many districts in England who are seeking to attract users of machinery to establish themselves in the neighbourhood. It is pointed out in one of the letters to the Clerk to the Reading Guardians, that such assessments amount to an annual tax of 2 per cent. and upwards, upon the value of the tenant's machinery, and that in comparison with such attacks the Income-Tax at 1s. in the £ is comparatively insignificant, because the latter tax is only placed upon net profits when earned, while the former tax is placed upon capital whether it is earning a profit or not. All foreign countries whose manufacturers compete with our industries adopt the

Digitized by Google

opposite policy, and not only have no such local taxation, but in many cases grant bounties upon their exports.

* * *

Another "Paper Trust" Fight.

MEXICO, like the United States, objects to the influence of what is termed a "Paper Trust." Recently all the paper mills in the Federal district — six in number — were merged into a trust for the purpose of controlling the output and the price of paper. The six mills have a combined capital of 15,000,000 dols. A petition, signed by nearly all the publishing houses and printers in Mexico, has been submitted to President Diaz, requesting him to use his executive power to defeat the purposes of the combination.

THE *Windsor Magazine* for May is a very handsomely illustrated issue full of good reading matter. Justus Miles Forman's striking serial, "The Garden of Lies," works up to a magnificently dramatic climax, and Mrs. C. N. Williamson's attractive heroine, "The Girl who had Nothing but wanted Everything," has another remarkable experience in a story entitled, "Kismet and a V.C." "Dick Danvers Comes to Life" is the title of the latest and possibly the best yarn in Jerome K. Jerome's racy series, "Tommy and Co.," and is particularly well illustrated by L. Raven Hill. Another long complete story is from the pen of Mr. Arnold Bennett, and somewhat recalls the theme of his remarkably successful novel, "The Grand Babylon Hotel." A delightful story of child life, by Edward H. Cooper, adds a further note of variety to the fiction of the number. The most important of the articles is one dealing with the great paintings in the Royal Exchange. The majority of these are finely reproduced, and printed on a special sheet of art paper, among them being the fine historical paintings by Seymour Lucas, R.A., Stanhope Forbes, A.R.A., Solomon J. Solomon, A.R.A., Sigismund Goetze, Chevalier Tayler, Ernest Normand, Henrietta Rae, and the late Lord Leighton. Harry Furniss contributes an amusing paper, full of his own clever caricatures, on "Some Famous Big Men."

METALS.—Under the date of Wednesday last, Messrs. I. and J. Hyman, metal merchants, Britannia-street, Kings-cross, quote (subject to market fluctuations) their prices for Old Scrap Metals:—

	Per Ton.
Clean Copper	£52 0 0
Tinned or Brassiery Copper	49 0 0
Gun Metal	47 0 0
Brass	37 10 0
Old Zinc	17 17 6
New Zinc Cuttings	19 15 0
Lead (subject to usual 4-lbs. per cwt. tare) ...	11 0 0
Hollow Pewter	92 0 0

THE Commercial Intelligence Branch of the Board of Trade has been removed from 50, Parliament-street, S.W., to 73, Basinghall-street, E.C.

MARKET REPORTS.

Telegrams—"STONHILL, LONDON."

Chemicals.

Market steady. AMMONIA ALKALI, 58 per cent., is quoted at £4 10s.; BLEACHING POWDER, soft wood, £4 5s. to £4 7s. 6d.; CAUSTIC SODA, 76 to 77 per cent., £10. 10s.; SODA CRYSTALS, £2 17s. 6d. to £3 2s. 6d; and RECOVERED SULPHUR from £5 5s. to £5 10s.

Chemical Wood Pulps.

There is a very fair demand, especially for the better qualities. Makers keep very firm in their ideas of price, particularly for next year. For delivery during 1904 very little remains unsold.

Mechanical Wood Pulps.

Prices are somewhat uncertain, as the demand is limited.

Esparto.

Market quiet and little business being done. Quotations nominally unaltered.

The arrivals of ESPARTO at British ports during the week were:—1,320 tons from Aguilas, landed at Granton (940 tons of which were to the order of Morris and Co.), and 876 tons, from Arzew, to the order of R. H. Hay and Co., landed Granton.

Home and Foreign Rags.

LONDON: Trade steady at firm values. —BRISTOL: Moderate business, quotations unaltered.—MANCHESTER: All grades move off fairly well.—EDINBURGH: Fair trade passing at previous quotations.—DUBLIN: Market dull.

The exports of PAPER STOCK last week were:—To Australia, 89 tons; Belgium, 120 tons; Canada, 23 tons; Denmark, 131 tons; France, 258 tons; Germany, 56 tons; Holland, 474 tons; India, 32 tons; Prussia, 18 tons; Sweden, 32 tons; United States 413 tons.

In FOREIGN RAGS, French and Belgian goods are in brisk demand; German and Dutch packers report a quiet market.

The arrivals of FOREIGN RAGS at British ports last week were:—From Belgium, 1,269 bales; Canada, 34 bales; Channel Islands, 13 bales; Denmark, 40 bales; France, 1,859 bales; Germany, 503 bales; Holland 508 bales; Italy, 60 bales; Norway, 9 bales; Sweden, 134 bales.

Rosin.

Market firmer; demand steady.

Minerals, etc.

The demand for CHINA CLAY has somewhat slackened of late and some of the markets abroad are not in a good condition, while competition is very keen. MINERAL WHITE and BARYTES are in request, and there is a moderate business being transacted in

Digitized by Google

FRENCH CHALKS and SATINITE. AGALITE, at from £3 to £3 10s. c.i.f. U.K. ports, is in growing demand; large quantities are used in America and on the Continent.

LIST OF ADVERTISERS.

Where number of page is omitted the advertisement does not appear in this issue.

Alkali, Etc. PAGE

Brunner, Mond & Co., Ltd. ... ... *Cover ii.*
United Alkali Co., Ltd. ... ...

Analysts, Experts, Engineers, &c.

Ekman, C. D. 33
Hurst, George H. 35
Sindall, R. W. 33

Belting, etc.

Sutcliffe Bros. ... ...

Boiler Coverings and Composition.

Emmett, James, Ltd. 33
Sutcliffe Bros. 33

Chemicals.

Bramwell, E., & Son ... ...
Brunner, Mond & Co., Ltd. ... ... *Cover ii.*
Pochin, H. D., & Co., Ltd. ... ...
Spence, Peter & Sons, Ltd. 13
United Alkali Co., Ltd. ... ...

Colours.

Cardwell, J. L., & Co. 35
Cornbrook Chemical Co. 33
Hinshelwood, Thos., & Co. 35
Levinstein, Ltd. 35
Manchester Aniline Co. 35
Pochin, H. D., & Co., Ltd. ... ...
Via Gellia Colour Co. ... ... 9 and 35

Dandy Rolls.

Green, W., & Son ... ...
Marshall, T. J., & Co. 19

Economisers (Fuel).

Green, E., & Son, Ltd. ... ... *Cover i.*

Engines (Steam).

Milne, James, & Son, Ltd, ... 7

Esparto Pulp.

Grondal, A. L. 31

Felts and Jackets (Papermakers').

Huyck, F. C., & Sons 15
Kenyon, James, & Son 17
Porritt, Joseph, & Son ... ...
Whitehead, R. R., & Bros., Ltd. 17

Mill Refuse, Treatment of.

Liquid Destructors, Ltd. 33

Minerals, Etc.

Belvoir and Newark Plaster Co. 35
Best, James, and Sons 35
Birch, W. Singleton, & Son, Ltd. 35
Bodelva and Lantern China Clay Works 35
Cafferata & Co. 35
China Clay Co. 35
Howe, John, & Co. 35
Lassale, Th. 35
Pochin, H. D., & Co., Ltd. ... ...
Rogers, J., & Co. 35
Satinite Co. 13
Varcoe & Sons 20
Winser & Co. 35

Miscellaneous.

Directory 35
Machinery for Sale and Wanted 19
Paper Mill Directory ... ...
Situations Vacant and Wanted 19

Oils and Lubricants.

Diamond Oil Co., Ltd. ... ...
Sutcliffe Bros ... ...

Paper and Pulp Making Machinery. PAGE

Bentley & Jackson, Ltd. ... ... 4—5
Bertram, James, & Son, Ltd. ... ... *Cover iii.*
Bertrams Ltd. 19
Dietrich, Robert 11
Füllner, H. ... ... *Cover iv.*
Lechla, O. ... ... *Cover iv.*
Marx, J., & Co. ... ...
Masson, Scott & Co., Ltd. ... ...
Milne, James, & Son, Ltd. 7
Voith, J. M. ... ...
Walmsley, Chas., & Co., Ltd. ... ...
Wandel, Chr. ... ... *Cover i.*
West End Engine Works ... ...
Wurster, Dr. C. 17

Paper Bag Machinery.

Bumsted & Chandler 33

Paper Stock.

Beaumont, J., & Co. 33
Bradford, John S., & Co. ... ...
Caldwell, J., & Sons 33
Chalmers, E., & Co., Ltd. 35
Freese, Jean ... ...
Hay, R. H., & Co. ... ...
Hyman Bros. 1

Rag Pulps, &c.

Courtelary Wood Pulp Works Co. ... ...

Roll and Plate Engravers, etc.

Fulton, John, & Co. 19

Rubber Stamps, &c.

Winnett's National Stamp Co. ... ...

Sizing.

Grove Chemical Co., Ltd. 35

Strawboard Centres.

Boyd, Hart & Co. 35

Straw Pulp.

Grondal, A. L. ... ...
Vereinigte Strohstoff-Fabriken 15

Tools (Papermakers').

Makin, William, & Sons ... ... 15 and 35

Typewriters.

Remington Typewriter 15

Ventilators, Etc.

Sutcliff Ventilating and Drying Co. 35

Water Supplies.

Abundant Water Supply Co. 35
Isler, C., & Co. 35
Le Grand & Sutcliff ... ... 33 and 35

Wood Pulp.

Actiengesellschaft für Maschinenpapier-Fabrikation ...
Alsing & Co., Ltd. 35
Andrews & Co., Ltd. 20
Berner & Nielson 17
Forsmarks Cellulose Fabrik ... ...
Grant, W., & Co. 35
Grondal, A. L. ... ...
Hay, R. H., & Co. ... ...
Henderson, Craig & Co., Ltd. ... ...
Johnsen, Jorgensen and Wettre 24
Kommanditbolaget C. Fr. Waern & Co. 33
Lovenskiold-Fossum 9
Makin & Bancroft 17
Munds, Wilh. ... ...
Olrog, Thv. ... ...
Skotselv Cellulosefabrik 15
Storviks Sulfit Aktiebolag ... ...
Taylor, F. D., & Co. ... ...
Taylor, W. G., & Co., Ltd. ... ... *Cover i.*
Tilsit Zellstoff Fabrik 20
Wertheim, A., & Co. 28
Wood, Harry B. ... ...

Continental Opinion of the WORLD'S PAPER TRADE REVIEW, "I take this opportunity to speak out that your Journal has NO EQUAL of its kind in all countries.—I remain, yours faithfully, M. BEHREND. Prince Bismarck's Paper Mill, Varzin, Germany."

THE WORLD'S PAPER TRADE REVIEW is a widely informed and well-managed enterprise, of great value to exporters for its exact Market Reports and statistics of RAW Material.—*Central-Blatt fur die Deutsche Papier-Fabrikation*, Dresden.

Digitized by Google

ALL KINDS of WOOD PULP.

AGENTS ONLY.

Digitized by Google

THE WORLD'S Wood Pulp Industry.

A Weekly Record of the Latest Information of Interest to Manufacturers of Chemical and Mechanical Wood Pulps, Agents, Buyers, and Others.

LONDON: 58, SHOE LANE, E.C.

British Imports.

THE arrivals of wood pulp at British ports during the week ended April 23rd were as follows from the countries mentioned:—

CHEMICAL—DRY.		
Sweden	1,178 tons	£9,070
Norway	1,004 ,,	7,559
Canada	125 ,,	1,000
Prussia	115 ,,	964
Portugal	150 ,,	975
Holland	98 ,,	815
Germany	70 ,,	735
CHEMICAL—WET.		
Norway	594 tons	£2,383
Sweden	200 ,,	775
MECHANICAL—DRY.		
Sweden	10 tons	£45
Norway	10 ,,	45
MECHANICAL—WET.		
Norway	4,526 tons	£10,112

The Scandinavian Market.

THE ordinary general meeting of the Scandinavian Traemasseforening was held last week, when Mr. H. E. Heyerdahl, president of the Norwegian branch of the Association, presided. Reference was made to the advance in prices due to the increased consumption of news. Stocks of pulp were reported to be comparatively small, and the outlook was considered encouraging, with a maintenance of profitable prices.

MR. C. E. SONTUM, of Christiania, the Canadian agent, has made the following report:—"As usual, during war periods, the market for wood pulp and paper has become stronger. Pulp manufacturers are holding back and not offering so freely, in expectation of a further increase in the prices, as there are many enquiries in the market. I learn that a parcel of 600 tons for delivery during 1904 has been sold at a price equal to 40s. 6d. per ton net f.o.b. (including agent's commission), and that a bid of 38s. 6d. per ton f.o.b. (including commission) for a parcel of 1,500 tons has been refused. Cellulose continues going up, the value, f.o.b., Scandinavian ports may now be quoted at £6 18s. 8d. for "strong" and £7 10s. 8d. for 'easy bleaching,' or fully eleven shillings more than a year ago. I mention this in the interest of the Canadian exporters, so they may know what the Norwegian shippers ask at present, and I may add, there has been considerable enquiry from the United States lately for prompt shipment. I am just back from the business trip to the principal cities of Sweden and Denmark, and to Hamburg. I am pleased to say that I succeeded in interesting different firms for Canadian manufactures. The importers on this side seem to have quite a different opinion about Canada's ability to compete both in quality of goods and in prices than they had some years ago."

France.

REPORTING on the wood pulp market in France, M. A. L. Grondal, of Paris, states that the market still continues firm, especially for all grades of chemical pulps.

THE imports of mechanical pulp into France during February amounted to 86,718 metrical quintals (about 10 of which = 1 ton), as compared with 47,352 metrical quintals in the corresponding month of last year, and 46,175 metrical quintals in February, 1902.

FRENCH importations of chemical pulps during February were 47,671 metrical quintals, against 59,522 metrical quintals in the same month of last year, and 51,146 metrical quintals in February, 1902.

Germany.

THE Simonius'sche Cellulose Fabrikation, A.G., in Wangen, Allgau, announce a divi-

Digitized by Google

dend of 6 per cent. Last year 5½ per cent. was paid.

American Market.

ALL grades of chemical wood pulp, according to New York advices, are in active demand at high prices. Bleached sulphite is reported scarce. Stocks of both foreign and American grades are limited.

THERE is an absence of activity in the mechanical wood pulp market. Purchasers hold back from making offers, and consumers are slow in the matter of enquiries. Prices rule from 16 to 18 dols.

Canadian Exports.

CANADA exported wood pulp to the following countries during January last and for the correspouding month of the previous year:—

	Jan., 1903.	Jan., 1904.
United States	$176,351	$109,444
Great Britain	58,811	20,464
Other countries	1,988	5,113
Totals	237,150	135,021

DURING July-January the comparative values of the wood pulp exports were:—

To	July-Jan., 1902-3.	July-Jan., 1903-4.
United States	$1,004,336	$1,045,139
Great Britain	668,857	367,163
Other countries	2,707	23,967
Totals	1,675,900	1,436,269

CANADIAN exports of wood pulp during January last amounted to 81,662 dols. worth. The whole was taken by the United States. The exports in January, 1903, were worth 78,108 dols. The exports of pulp wood (supplied entirely to the United States) during the seven months ended January last were valued at 1,021,332 dols. as against 1,022,120 dols. worth exported during the corresponding period of the previous year.

Canadian Rossed Wood.

WRITING from Toronto, Ont., a correspondent says that exporters of wood pulp are pleased with the decision of the Board of United States General Appraisers that rossed pulp wood is free of duty. To exporters of pulp it gives no particular satisfaction, for it means that competitors in the United States will not have the cost of producing from Canadian raw material increased by even a nominal duty on wood that has been rossed. In so far, too, as the absence of an American duty facilitates the sale of wood to the United States manufacturers, it tends to bring up the price of wood for Canadian manufacturers, who have, in some circumstances, to buy their wood from farmers and pulp wood operators, as was the case this last year. Of course, it could not reasonably be expected that the advocates of a Canadian export duty on pulp wood would rejoice over the declaration that pulp wood is free from an American import dutv.

Acadia Pulp and Paper Co.

THE latest development in the affairs of the Acadia Pulp and Paper Co., of Nova Scotia, is the effort to sell the mills. At the suit of the Indian and General Trust, Ltd., the high sheriff of Halifax recently offered for sale several properties of the company in the County of Queen's and Halifax. The properties included, besides the mills, land at Milton, Herring Cover, Lake Middleton, Six Miles Lake, Rossignol, Liverpool, Nine Miles, Eight Miles and Ten Miles Lakes, and Upper Lake in Queen's County and properties at Shad Bay, Halifax County. The trust company started the bidding at 50,000 dols., but as no bids followed, and as the court had put in a reserve bid, the sale was declared off. Under authority of the administrators, one of the mills is running on stocks of wood already at the mill, the pulp being shipped to the States whenever the market shows a profit on transactions; but no shipments are being made to Great Britain as prices do not warrant exports. Under present arrangements, the mill can be closed down whenever operations cease to be profitable.

Ontario.

A DEPUTATION from New Ontario has secured from Premier Ross, of Ontario, a promise to so amend the act of last session as to provide that Crown Lands which have been sold, and which, because of three years' arrears of payments by the purchaser, will revert to the Crown at the end of the present year, may be redeemed by the owner within one year thereafter.

MAYOR JOHNSTON, of Parry Sound, Ont., and associates have applied to the Ontario Government for the lease of a valuable water power at Canal Rapids, on the Magnetawan River, near the Georgian Bay. The proposal is to build a large pulp mill and other industries.

New Patents.

SPECIFICATIONS PUBLISHED, 1903.

10,909. Calenders for cloth and paper. Eck.
25,158. Drying apparatus, more particularly intended for the drying of paper and cloth in web. Frederking.

ARRANGEMENTS have been completed whereby a department of forestry is to be added to the Ontario Agricultural College at Guelph, Canada. Mr. Zavitz, a graduate of McMaster University, Toronto, and an undergraduate of Yale Forestry College, has been appointed director of the department.

Digitized by Google

BRITISH IMPORTS of CHEMICAL and MECHANICAL WOOD PULP

For the Week Ended April 23rd, 1904.

SPECIALLY COMPILED FOR THE BRITISH WOOD PULP ASSOCIATION.

An Official Account of the Registered Quantities and Values of Chemical and Mechanical Wood Pulp imported at the various ports of the United Kingdom.

CHEMICAL—DRY.

Date.	Ports.	Vessel.	Port whence.	Packages.	Quantity.	Value.	Importer.
1904.					Tons.	£	
April 18	London ...	Thule ...	Gothenburg ...	450 bales	59	460	Page, Son & East
,, 18	,, ...	Pollux ...	Uddevalla ...	80 ,,	10	80	Berner & Nielsen
,, 18	,, ...	,, ...	,, ...	800 ,,	100	750	,, ,,
,, 18	,, ...	Cameo ...	Christiania ...	240 ,,	30	217	Andrews & Co.
,, 18	,, ...	Kiew ...	Konigsberg ...	254 ,,	50	500	Becker & Co.
,, 20	,, ...	Carl XV. ...	Gothenburg ...	2,032 ,,	250	2,000	W. G. Taylor & Co.
,, 23	,, ...	Thorsten ...	,, ...	136 ,,	20	200	C. Shaw, Lovell & Sons
,, 23	,, ...	,, ...	,, ...	35 ,,	5	43	Becker & Co.
,, 23	,, ...	Bonheur ...	Drammen ...	410 ,,	50	400	Berner & Nielsen
,, 23	,, ...	Rhein ...	Stettin ...	250 ,,	50	575	Henderson, Craig & Co.
,, 22	Cardiff ...	Ivanhoe ...	Trondhjem ...	457 ,,	57	457	T. Owen & Co.
,, 18	Hartlepool ...	Munin ...	Hamburg ...	160 ,,	20	160	West Hartlepool Steam Naviga-
,, 20	Hull ...	Borodino ...	Konigsberg ...	250 ,,	50	350	T. Wilson, Sons & Co. [tion Co.
,, 21	,, ...	Lorne ...	Halmstad ...	503 ,,	50	400	,, ,,
,, 21	,, ...	Louise ...	Konigsberg ...	84 ,,	15	114	,, ,,
,, 23	,, ...	Ariosto ...	Gothenburg ...	320 ,,	40	280	Henderson, Craig & Co.
,, 19	Lancaster ...	Ivanhoe ...	Trondhjem ...	3,200 ,,	400	2,800	Johnsen, Jorgensen & Wettre
,, 19	Manchester ...	Halfdan ...	Gothenburg ...	560 ,,	70	560	H. Raby & Mather
,, 19	,, ...	Hogland ...	,, ...	320 ,,	40	300	Henderson, Craig & Co.
,, 21	,, ...	Spurt ...	Christiania ...	1,480 ,,	185	1,448	Andrews & Co.
,, 21	,, ...	,, ...	,, ...	320 ,,	40	330	Maxwell, Holm & Co.
,, 21	,, ...	Halfdan ...	Halmstad ...	502 ,,	50	335	Johnsen, Jorgensen & Wettre
,, 21	,, ...	,, ...	,, ...	560 ,,	70	500	,, ,,
,, 23	,, ...	Argyle ...	Drammen ...	80 ,,	10	85	,, ,,
,, 20	Newcastle ...	John Ormston	Rotterdam ...	237 ,,	50	395	Tyne Steam Shipping Co.
Query } ,, 15	Rochester ...	Sune ...	Halmstad ...	3,000 ,,	300	2,250	A. E. Reed & Co.
,, 18	South Shields	Sovereign ...	Christiania ...	164 ,,	21	164	P. H. Matthiessen & Co.
,, 19	Aberdeen ...	Girdleness ...	Drammen ...	460 ,,	52	416	J. Cook & Son
,, 19	,, ...	,, ...	Skien ...	200 ,,	35	270	,, ,,
,, 22	,, ...	Caledonia ...	Rotterdam ...	100 ,,	20	200	R. Connon & Co.
,, 21	Glasgow ...	Shuna ...	Gothenburg ...	240 ,,	30	240	Henderson, Craig & Co.
,, 21	,, ...	,, ...	,, ...	330 ,,	44	352	Glen & Co.
,, 19	Grangemouth	Glasgow ...	Rotterdam ...	134 ,,	28	220	J. Rankine & Son
,, 18	Granton ...	Bele ...	Gothenburg ...	260 ,,	40	320	Chr. Salvesen & Co.
,, 21	,, ...	Girdleness ...	Drammen ...	240 ,,	30	240	Becker & Co.
,, 21	,, ...	,, ...	,, ...	320 ,,	39	312	Chr. Salvesen & Co.
,, 21	,, ...	,, ...	Skien ...	275 ,,	55	440	Becker & Co.
,, 20	Leith ...	Starleyhall ...	Oporto ...	1,600 ,,	150	975	T. Aitken
,, 18	Belfast ...	Bengore Head	St. John, N.B.	1,183 ,,	125	1,000	G. Heyn & Sons
,, 4	London ...	Annie ...	Danzig	204 rolls	30	240	H. B. Wood

No goods delivered to this entry.

CHEMICAL—WET.

1904.					Tons.	£	
April 22	Cardiff ...	Ivanhoe ...	Trondhjem ...	2,270 bales	454	1,816	T. Owen & Co.
,, 23	Hull ...	Ariosto ...	Gothenburg ...	2,000 ,,	200	775	Henderson, Craig & Co.
,, 18	South Shields	Sovereign ...	Christiania ...	1,120 ,,	140	567	P. H. Matthiessen & Co.

MECHANICAL—DRY.

1904.					Tons.	£	
April 18	London ..	Karl XV.	Gothenburg ...	68 bales	10	45	Berner & Nielsen
Query } March 7	,, ...	Bonheur ...	Christiania ...	50 ,,	10	45	C. Shaw, Lovell & Sons

MECHANICAL—WET.

1904.					Tons.	£	
April 18	London ...	Cameo ...	Christiania ...	640 bales	80	180	W. E. Bott & Co.
,, 23	,, ...	Bonheur ...	Drammen ...	750 ,,	150	345	Berner & Nielsen
Query } March 7	,, ...	,, ...	Christiania ...	250 ,,	25	54	F. Dessen & Co.
April 20	Cardiff ..	Sarp ..	Sarpsborg ...	6,560 ,,	820	1,784	T. Owen & Co.
,, 21	Manchester ...	Argyle ...	Christiania ...	2,250 ,,	350	720	Andrews & Co.
,, 19	Preston ...	Telegraf ...	Arendal ...	7,823 ,,	1,036	2,331	H. Tyrer & Co.
,, 19	Queenboro' ...	Ragne ...	Drammen ...	7,939 ,,	1,193	2,480	E. Lloyd, Ltd.
,, 19	Rochester ...	Mercur ...	,, ...	3,619 ,,	663	1,662	A. E. Reed & Co.
,, 19	Aberdeen ...	Girdleness ...	Skien ...	474 ,,	79	198	J. Cook & Son
,, 21	Granton ...	,, ...	Drammen ...	1,300 ,,	130	358	Becker & Co.

Digitized by Google

A. WERTHEIM & Co.,

HAMBURG,

SUPPLY ALL KINDS OF

Sulphite,

Soda and

Mechanical

WOOD PULPS.

OFFICES AT:

CHRISTIANIA (Norway)	Kirkegaden No. 20.
GOTHENBURG (Sweden)	Lilla Kyrkogatan No. 2.
MANCHESTER	Guardian Buildings (opposite Exchange).
LONDON	77a, Queen Victoria Street, E.C.
PARIS	Rue de Londres No. 29.
LYONS ..	54, Cours Gambetta.
MILAN	24, Via Solferino.
TOLOSA (Spain) ..	18, Calle San Francisco.
ST. PETERSBURG . .	Kleine Podjatscheskaja, No. 4, Qu. 16.
NEW YORK .	99, Nassau Street.

Telegraphic Address:

"WERTHEIMO, HAMBURG."

Digitized by Google

Office of the WORLD'S PAPER TRADE REVIEW,
Telegrams: "STONHILL—LONDON." *68, Shoe Lane, London, E.C.*

CURRENT PRICES
OF
PAPERMAKING MATERIALS.

CHEMICALS.

Quotations are nominally as follows

Alkali, Ammonia, 58%	...	f.o.b. Liverpool	£4 10 0
,, ,, 48%	...	,, ,,	4 5 0
Alum (Ground), tierces	...	,, ,, 2½%	5 10 0
,, barrels	...	,, ,, 2½%	5 12 6
,, tierces	...	,, Hull 2½%	5 5 0
,, ,,	...	f.o.b. Glasgow 2½%	6 0 0
,, (Lump) barrels	...	f.o.b. Liverpool 2½%	5 0 0
,, tierces	..	,, ,, 2½%	4 17 6
,, barrels	...	,, Hull 2½%	4 17 6
Alum tierces	...	London 2½%	5 7 6
,, ,,	...	f.o.b. Glasgow 2½%	5 10 0
Alumina Sulphate Bags	...	f.o.b. Tyne net	3 10 0
Aluminoferric Cake, slabs	...	Liverpool	2 15 0
,, ,, tierces		,,	3 2 6
Alumina Cake, slabs	...	Glasgow	2 15 0
Blanc Fixe	...	f.o.b. Tyne net	5 15 0
Bleach	...	,, ,, net	4 7 6
,, (soft wood) ...	...	f.o.r. Lancs. net	4 7 6
,, (hard wood) ...	...	f.o.b. Liverpool net	5 0 0
,, (soft wood) ...	...	landed London net	4 15 0
Borax (crystals) ...	...	f.o.b. Liverpool net	13 0 0
,, (powdered) ...	...	... ...net	14 0 0
Caustic White, 76% ...	...	f.o.b. Liverpool net	10 10 0
,, ,, 74% ...	...	,, ,, net	10 5 0
,, ,, 70% ...	...	,, ,, net	9 15 0
,, ,, 70% ...	...	f.o.r. Lancs. net	9 12 6
,, ,, 60% ...	...	f.o.b. Liverpool net	8 15 0
Caustic Bottoms ...	...	f.o.r. Lancs. net	6 5 0
Chloride of Barium Casks		f.o.r. Hull net	6 0 0
Hypo-Sulphite of Soda	...	f.o.r. Tyne	5 0 0
,,	...	f.o.b. Tyne	5 5 0
Oxalic Acid	...	f.o.b. Liverp'l net	per lb. 2½
Salt Cake	...	f.o.b., ,,	1 17 6
Satin White	...	f.o.b London	5 0 0
Soda Ash, Carbonated, 52%		f.o.b. Liverpool net	6 2 6
,, ,, 48% ...		,, ,, net	6 0 0
Soda Ash, Carbonated 52% ...		f.o.r. Widnes net	6 0 0
Soda Ash, Carbonated 48% ...		f.o.r. Widnes net	5 17 6
Soda Ash, Caustic, 48% ...		f.o.b. Liverpool	6 5 0
Soda Ash Caustic 52% ...		,, ,,	6 7 6
Sal Ammoniac (1sts)	...	f.o.b. Liverpool	42 0 0
,, (2nds)	...	,, ,,	40 0 0
Soda Crystals	...	f.o.b. Tyne net	3 2 6
,, ...	...	ex ship Thames 2½%	3 5 0
,, ...	...	f.o.b. Liverpool 5%	3 7 6
Sulphate of Ammonia	...	,,	12 5 0
Sulphate of Copper ...	...	,, Liverpool 5%	21 0 0
Sulphur, rolls	...	f.a.s. works net	6 12 6
,, flowers ...	...	,, ,, ,,	7 12 6
,, recovered ...	...	,, ,, ,,	5 10 0

FOREIGN CHEMICALS.

F.o.b. Continental Ports:

Bleaching Powder, 35%-37% casks		f.o.b. Antwerp	4 5 0
Hypo-Sulphite of Soda, casks		f.o.b. Rotterdam nett	4 15 0
White Sugar of Lead, casks		f.o.b. Hamburg ...	24 10 0
Sulphate of Alumina, 14%-15% casks		f.o.b. ...	3 7 6
Zinc Oxide	...	f.o.b. less 2½%	22 0 0

STRAW PULPS.

Prices, c.i.f. English and Scotch Ports.

German, dry, No. 1	...	... ...	£13 0 0
,, ,, No. 2	...	... ...	12 0 0
Dutch	...	... ...	11 0 0

CHEMICAL WOOD PULPS.

GREAT BRITAIN.

Prices, c.i.f. London, Manchester, Granton, etc.

Sulphite, Bleached	...	... ...	£11 10 0—12 0 0
,, Unbleached, 1st quality		...	9 0 0— 9 5 0
,, ,, Ordinary		...	8 5 0— 8 15 0
,, ,, 2nd quality		...	8 0 0— 8 5 0
Soda, ,, ... 1st quality		...	7 15 0— 8 0 0
,, ,, ... 2nd ,,		...	7 5 0— 7 10 0

FRANCE.

C.i.f. Rouen per 100 kilos. (2 cwt.).

Sulphite, Unbleached, 1st quality ...	Frs. 22–23
,, Ordinary	20–21
,, ,, 2nd quality ...	19–20
,, Bleached, Superior	31–32
,, ,, Inferior	26–29
Soda and Sulphate, Unbleached ...	19–20
,, ,, 2nd quality ...	18–19

UNITED STATES.

Sulphite, American, Bleached	2.40c— 2.50
,, ,, Unbleached ...	1.85 — 2.10
,, Foreign, Bleached	3 — 3.30
,, ,, Unbleached	1.95c— 2.15c
Soda, American, Bleached	2.12c— —
Soda, American Unbleached	2.50c— 2.60c
,, Foreign Bleached	2.55 — 2.85
,, ,, Unbleached	1.80 — 1.90

MECHANICAL WOOD PULPS.

GREAT BRITAIN.

Prices, c.i.f. London, Manchester, Preston, Granton, etc.:

Pine, 50% moist, prompt delivery ...		£2 2 6
,, ,, forward delivery ...		2 5 0
,, dry, prompt delivery ...	4 5 0	—4 10 0
,, ,, forward delivery ...	4 15 0	—5 0 0

FRANCE.

Prices c.i.f. Rouen, per 100 kilos. (2 cwt.).

Pine, 50% moisture	Frs. 11 —11.50
,, dry	11 —11.50
Aspen ,, fine, dry	15.50—16.50
Brown (half-chemical), 50% moisture ...	11 —11.50
,, ,, dry	11 —12

UNITED STATES.

F.o.b. Mill, nearest port (1 to 2,000 lbs.) ... ... 15 cents.

ESPARTO.

Prices ex-ship London, or f.o.r. Leith, Granton, Garston and Tyne Docks, are nominally as follows:—

Spanish—	Fair to Good	... ...	£4 7 6—4 12 6
	Fine to Best	... ...	5 2 6—5 7 6
Oran—	Fair to Good	... ...	3 3 9—3 6 3
	First Quality	... ...	3 8 9—3 12 6
Tripoli—	Hand-Picked	... ...	3 8 9—3 10 0
	Fair Average	... ...	3 3 9—3 5 0
Bona and Philippeville		... ...	3 10 0—3 12 6
Sfax and Gabes	... ...	... ...	3 8 9—3 10 0

ESPARTO PULP.

Prices, c.i.f. Rouen, per 100 kilos (2 cwt.).

First quality	Frs. 42. —43.
Second quality	40. —41.

Digitized by Google

FOREIGN RAGS.

FRENCH.

Quotations f.o.b. Rouen

Extra Linens	—	Blue Linen No. 1 ...	8/0
White Linens, No. 1 ...	22/0	Fustians	4/0
,, No. 2 ...	17/0	Old Bagging (solid) ...	2/9
,, No. 3 ...	14/0	,, (common)	1/0
,, No. 4 ...	8/0	Hemp, tarred in coils	11/0
,, No. 5 ...	4/6	Hemp strings	10/0
Gray Linens (strong)	13/0	NEW CUTTINGS.	
,, (extra) ...	16/0	White Linen, ...	33/0
White Cotton, No. 1 ...	13/0	Unbleached Linen ...	30/0
,, No. 2 ...	9/0	Gray Linen	23/0
,, No. 3 ...	7/6	Extra White Cotton ...	19/0
,, No. 4 ...	6/0	Ordinary ,, ...	18/0
,, No. 5 ...	3/0	Curtain Cuttings ...	17/0
White Knitted ...	17/0	Stay ,, ...	15/0
Muslins	6/0	Extra Light Prints ...	13/0
Extra Light Prints ...	8/0	Unbleached Cotton ...	21/0
Light Prints	4/0	Oxford	12/0
Dark Prints	1/6	Flanellettes	15/0
Blue Cotton, No. 1 ...	5/6	Blue Cotton	10/0

GERMAN.

Quotations are as follows

NWC	19/0	Dark Cottons	2/10
SPFFF	20/0	Grey Linens I. ...	11/10
SPFFF and SPFF ...	18/0	,, II. ...	7/0
SPFF	15/0	CSPFFF	13/10
SPF	12/0	CSPFF	9/10
Light Prints	7/0	CSPF	7/5
Fustians	3/10	Dark Blues (selected)	7/0
Mixed Coloured Cottons	3/10	Jute, No. I.	3/0
		,, No. II.	1/0

PRUSSIAN.

C.i.f. London, Hull, or Leith.

SPFF	13/6	CC (cotton)	3/0
SPF	9/0	Jute I	2/3
FG	8/0	,, II	1/6
LFB	6/3	Rope I	7/3
FF	3/0	,, II	4/3

BELGIAN:

Quotations, f.o.b. Ghent.

White Linens, No. 1	21/0	House Cloths	2/6
,, ,, No. 2	16/0	Old Bagging (solid) ...	3/0
,, ,, No. 3	12/0	,, ,, (common)	2/6
Fines (Mixed)	12/0	NEW.	
Grey Linens (strong)	9/6	White & Cream Linens	5/0
,, (extra)	14/0	White Cuttings ...	22/0
Blue Linens	8/0	Unbleached Cuttings	21/0
White Cottons No. 1 ...	18/0	Print Cuttings ...	8/0
,, No. 2 ...	15/0	FLAX AND HEMP WASTE.	
Outshots No. 3	10/0	Flax Waste, washed and dri	10/0
Seconds No. 4	7/9	Fair	8/0
Prints (Light)	7/0	Flax Card Waste ...	6/0
Fustians (Light) ...	3/6	Hemp Waste, No. 1 ...	8/0
Fustians (Dark) ...	2/0	,, ,, No. 2 ...	3/0
Black Cottons ...	3/0		
Hemp Strings (unt'r'd)	2/3		

DUTCH.

F.o.r. English ports.

Whites, No. 1	14/9	W. Manilla Rope (coils)	7/3
,, No. 2	9/9	do. Tarred ,, ...	4/9
,, No. 3	6/6	Canvas No. 1	14/0
Grey Linens	8/6	,, No. 2	10/0
Clean House Cloth ...	3/0	,, No. 3	6/0
Mixed Fustians ...	4/9	W. Untarred Rope ...	10/0
Coloured Prints ...	2/7½	Paper Shavings ...	
Dark Prints	2/1½	Free from wood ...	7/0
Blue Cottons	5/6	Mixed Bagging ...	2/7½
Light Lilac Cottons	7/0	Bright New Gunny ...	3/6
Muslins	9/9	New Bleached Cuttings	17/6
Mixed Hemp Rope Coils	8/3	Unbleached Cuttings	16/6
Broken (in bags) ...	6/0		

NORWEGIAN.

C.i.f. London, Hull, Tyne, and Grangemouth.

1st Rope (tarred)	8/3-9/0	2nd Canvas	7/6
2nd ,, ,, ...	5/0-5/9	Jute Bagging	
Manilla Rope (white)	10/6-11/0	Gunny	3/0-3/3
Best Canvas ...	11/9-12/0	Mixed	2/0-2/6

TURKISH.

F.o.b. Constantinople (per 100 kilos)

Whites, 1st ...	Francs 10	Ropes, Thick ...	Francs 10
,, 2nd ...	,, 5	,, Medium	,, 12
Coloured ...	,,	,, Thin	,, 15

STRAW.

Oat, ex steamer Thames	...	...	...	£1 7 6
Wheat ,, ,,	...	...	...	2 2 0

HOME RAGS.

LONDON.

N. White Cuttings	21/6-26/0	Canvas No. 1 ...	14/0-15/0
Fines (selected) ...	19/6-21/0	,, No. 2 ...	9/6-10/0
,, (good London) ...	17/0-17/6	,, ,, 3 ...	5/0
Outshots (selected)	10/0-13/0	Mixed Rope ...	2/9-3/3
,, (ordinary)	8/0-9/0	White Rope ...	4/0-6/6
London Seconds	1/6-1/9	White Manilla Rope	8/0-9/0
Country ,,	3/0-7/0	Coil Rope	8/0
London Thirds ...	0/9-1/3	Bagging	1/3-1/9
Country ,, ...	2/0	Gunny	2/0-2/6

BRISTOL.

Fines	17/6	Clean Canvas ...	13/6
Outshots	9/0	Second ,, ...	9/6
Seconds	5/0	Light Prints ...	6/6
Thirds	2/6	Hemp Coil Rope	9/0
Mixed Bagging ...	2/6	Tarred Manilla ...	7/0

MANCHESTER.

Fines	14/0-15/0	Blues	3/6-4/0
Outshots (best) ...	8/6-9/6	Bagging	2/3-2/6
,, (ordinary)	7/6-8/0	,, (common)	1/6-2/0
Seconds	4/0-4/6	W. Manilla Rope	9/0-10/0
Thirds	2/0-2/3	Surat Tares ...	2/9-3/0

EDINBURGH.

Superfines	15/0	W. Manilla Rope	9/6-10/0
Outshots	12/0	Tarred Manilla Rope	6/0
Mixed Fines ...	14/0	,, Hemp Rope	8/0
Common Seconds	8/0	Rope Ends (new)	5/0
First ,,	11/0	,, ,, (old)	3/0
Prints	6/0	Bagging	2/0-2/3
Canvas (best) ...	14/0	,, (clean) ...	3/0-4/0
,, 2nd ...	9/0		
Black Cottons ...	2/0		

GLASGOW.

Fines	12/6-16/0	Canvas No. 1 ...	15/0
Blues	4/6	,, No. 2 ...	10/0
Common Blues ...	3/3	Manilla Rope ...	8/0
Bagging	4/0	Tarred Hemp ...	9/0

DUBLIN.

White Cuttings ...	16/0	Mill Bagging ...	2/6
Fines	9/0	White Manilla ...	8/0
Seconds	4/6	Tarred Hemp ...	6/0
Light Prints ...	1/6	Rigging	10.0
Black ,, ...	1/0		

JUTE.

Good White	£17 0 0	—	19 0 0
Good	14 10 0	—	16 10 0
Medium	12 0 0	—	13 0 0
Common	11 0 0	—	12 0 0
Rejections	9 10 0	—	10 0 0
Cuttings	5 0 0	—	8 0 0

WASTE PAPERS.

Cream Shavings ...	9/0	Small Letters	3/9
Fine ,, ...	8/0	Large ,, ...	5/0
Mixed ,, ...	4/3	Brown Paper	2/3
White Printings ...	7/9	Light Browns ...	3/9
White Waste	3/0	Dark ,, ...	2/6
Wood Pulp Cuttings	3/3	Books & Pamphlets	3/9
Blue Paper	2/0	Strawboard Cuttings	1/3
Crushed News ...	3/0	Jacquards	2/6

For Export 25s. per ton extra.

BALING TWINE.

Hemp ...	4¾d. per lb.	5d. per lb	5¼d. per lb.
Mixed ...	4½d. ,,	4¾d. ,,	5d. ,,

STARCH.

F.o.r. London, less 2½%

Maize—	Crisp	£10 15 0
	Pearl	10 10 0
	Powder	11 0 0
	Special	11 10 0
Farina—	Prime	10 10 0
	B.K.M.F.	14 0 0
	Delivered:	
Rice—	Special (in chests) ... ... net	19 10 0
	Crystal (in bags) ... ... less 2½%.	18 10 0
	Granulated in bags) ... ,,	17 10 0
	Waste ... ... ,,	13 0 0
Dextrine—	... ...	14 0 0

ROSIN.

Quotations (ex wharf less 2½% discount) are as under:—

B/C	D	E	F	G	I	K	M	N	W G	W W
7/6	7/7½	7.9	8,0	8,1½	8,6	9/0	10/6	11/0	11/6	12 6

Digitized by Google

SIZING.

Prices are nominally as under:—

English Gelatine	...	...	Per cwt.	£3 0	0—4 10 0
Foreign ,,	...	...	,,	3 0	0—4 10 0
Fine Scotch Glues	...	...	,,	2 6	0—2 10 0
Best Long Scotch Glues	...	...	,,	1 10	0—2 0 0
Common Black	...	...	,,	1 13	0—2 0 0
"Town" Glues	...	...	,,	1 0	0—1 5 0
"Bone" Glues	...	...	,,	1 5	0—1 10 0
Foreign Glues	...	...	,,	1 0	0—1 5 0
Bone Size	...	...	,,	5	0— 8 0
Gelatine Size	...	...	,,	6	6— 10 0
Dry B.A. Pieces	...	...	,,	2 5	0—2 10 0
,, English Pieces	...	...	,,	1 10	0—2 0 0
Wet ,, ,,	...	...	,,	8	6— 9
,, Sheep Pieces	...	...	,,	3	0— 4 0
Buffalo Hide Shavings	...	...	,,	1 10	0—2 8 0
,, Picker Waste	...	...	,,	1 12	0—1 16 0

COLOURS.

Nominal Prices.

Mineral Black	...	...	...	Per Ton	£3 10 0
Black Peerless	...	...	...	,,	56 0 0
Ochre (English and Irish)	...	...	...	,,	*3 15 0
Ochre (French)	...	...	...	,,	*4 0 0
Pure Crawshay Turkey Red	...	...	...	,,	22 0 0
Red Oxide and Venetian Red	...	...	...	,,	*4 0 0
Umber (Derbyshire)	...	...	...	,,	*4 0 0
,, (Irish)	...	...	...	,,	2 0 0
Chrome (Pure)	...	...	...	Per Cwt.	2 10 0
Yellow (Imperial)	...	...	...	,,	0 14 0
,, (Bordeaux)	...	...	...	,,	0 12 6

*Higher Prices according to strength and shade

PASTE COLOURS, with 40% of Colour (less 2½ d/d.)

Orange Pulp	...	...	...	Per Cwt.	2 10 0
Golden Yellow Pulp	...	...	...	,,	1 16 0
Lemon Yellow Pulp	...	...	...	,,	1 16 0
Prussian Yellow	...	...	...	,,	1 16 0
Green (free from Arsenic)	...	...	...	,,	1 16 0
Paste Blue, 20%	...	...	...	,,	0 18 0
,, 33%	...	...	...	,,	1 4 0
,, 40%	...	...	...	,,	1 8 0

LIME.

Per ton, f.o.r. works 1r/-

LOADINGS, etc.

China Clay, in bulk, f.o.b. Cornwall, 8s. 6d. to £1 5s. 6d. (highest grade) per ton, bags 5s., and casks 9s. per ton extra; delivered Lancashire, £2 (for best papers), and commoner qualities 22/ to 36/ per ton.; best f.o.r. London, in casks, £2 7s. 0d. per ton; f.o.b Liverpool, in 5 cwt. casks, £2 to £2 5s. 9d. for export.

French Chalk, W.E., W.O., and other brands, £2 17s. 6d. to £4 8s. 0d. per ton, according to quality, delivered in most Yorkshire and Lancashire towns, also f.o.b. Glasgow, Belfast and London.

Italian Chalk, finest brands—f.o.b. Manchester, Liverpool, or London—I.W.A., "Portland Mills," and "Swan" marks, £4 to £5 per ton of 10 bags.

Agalite, in bags, c.i.f. U.K. ports, £3 to £3 10s. per ton.

Paper Makers' Plaster, 14/ per ton and upwards delivered.

Superfine Hardening, delivered Mills, 50/ per ton and upwards.

Patent Hardening (2 ton lots), f.o.r. Lancs., £2 19s. 6d.

Mineral White (also known as Terra Alba, and Sulphate of Lime), per ton f.o.r. or boat at makers works:—

Superfine, best picked white, finely ground	18/ — 28/
Superfine, second quality	
Pottery, best quality	
Pottery, No. 2 quality	

Gypsum

Light Pink	6/6 — 16/
Seconds	
Brown	
Thirds, selected	

Terra Alba and Gypsum delivered any Lancashire or Yorkshire station about 10/ per ton extra, except Manchester, which is only 8/ per ton extra. Delivered London stations about 7/ per ton extra.

Bauxite, minimum alumina, 60%, 17s. f.o.b.

Sulphate of Alumina, £3 15s. 0d. to £4 12s. 6d. per ton delivered to Mills.

Sulphate of Barytes, No. 1, £3 4s. 0d.; No. 2, £2 12s. 6d No. 3, £2 2s. 0d.; No. 4, £1 15s. 0d. per ton, less 2½%.

Magnesite (containing 98% Carbonate of Magnesia), raw ground, £4 10s. 0d.; calcined, £8 10s. 0d.

Magnesite (in lump), £1 19s. 6d. per ton.

Satinite, £3 4s. 6d., in casks, f.o.b. Liverpool or Manchester.

Chloride of Zinc, £6 18s. 6d. per ton.

A. L. GRÖNDAL, PARIS: 3 rue Grammont

SUPPLIES ALL KINDS OF

WOOD PULPS

— CHEMICALS AND MECHANICALS —

OF ALL ORIGINS.

AMERICAN POPLAR SODA PULP.

STRAW
ESPARTO } PULPS.

. . PULP WOOD . .

"Telegrams: GRONDAL, PARIS."

Codes used A B C ZEBRA Own Code.

Digitized by Google

AMERICAN IMPORTS OF

Paper, Paper Stock, Chemicals, &c.

The following is the latest weekly list, compiled from official returns, of American imports from the ports mentioned :—

Paper.

ANTWERP.—New York: 9 cases, W. Seyd; 1 case, Keuffel and Esser Co.; 14 cases, J. W. Hampton; 2 cases, Wallace and Co.; 10 cases, Spalding and Co.; 20 cases, Stursberg, Schell and Co.; 115 cases, Dingelstedt and Co.; 9 cases, W. Huermann; 1 case, Neuberger and Co.; 13 cases, Kupfer Bros.; 30 cases, Sheldon and Co.; 8 cases, American Tobacco Co.; 8 cases, Dejonge and Co.; 2 cases, Knauth, Nachod and Kuhne; 2 cases, Lopez and Co.; 4 cases, Japan Paper Co.; 12 cases, G. Harberger; 9 cases, Wells, Fargo and Co.; 21 cases, Sanderson and Co.

BREMEN.—New York: 14 cases, Kupfer Bros.; 11 cases, McLauren Bros.

HAMBURG.—New York: 5 cases, C. Dietzgen; 6 cases, B. Russegger; 7 cases, Dejonge and Co.; 4 cases, Knauth, Nachod and Kuhne; 31 cases, A. Kraut; 16 bales, Amsinck and Co.; 15 cases, Germania Import Co.; 10 cases, Mayer and Co.; 44 cases, Lindenmeyr and Son. Philadelphia: 16 cases, C. Beck Paper Co.; 16 cases, J. Wanamaker; 36 packages, Brown Bros.

HULL.—New York: 7 cases, Wakum and McLaughlin; 40 cases, Walter Mial.

LIVERPOOL.—New York: 2 cases, Barbour Flax Spinning Co.; 6 cases, H. Bainbridge and Co.; 7 cases, Dingelstedt and Co.

LONDON.—New York: 3 cases, Einstein, Wolff and Co. Boston; 31 cases, Proctor and Co.; 67 cases, Downing and Co.

ROTTERDAM.—New York: 49 cases, Amsinck and Co.; 2 cases, Lindenmeyr and Sons; 46 cases, Hensel, Bruckmann and Lorbacher; 8 cases, Sheldon and Co.

Manillas.

ANTWERP.—New York: 88 bales, Butterworth and Co.; 29 bales, A. Kazenstein.

HAMBURG.—New York: 218 bales, F. Salomon and Co.; 25 bales, Salomon Bros.

LIVERPOOL.—Boston: 187 coils, Hollingsworth and Vose Co.; 123 bales, Butterworth and Co.

LONDON.—Boston: 222 coils, Hollingsworth and Vose Co.

Rags.

ANTWERP.—New York: 592 bales, Butterworth and Co.; 200 bales, Train, Smith and Co.; 131 bales, Castle, Gottheil and Co.; 182 bales, Goldman, Sachs add Co.; 147 bales, A. Salomon; 334 bales, A. Kazenstein.

GLASGOW.—New York: 186 bales, Millar and Co.

HAMBURG.—New York: 114 bales, F. Salomon and Co.; 235 bales, Salomon Bros. and Co.

HULL.—New York: 187 bales, Salomon Bros. and Co.; 1,113 bales, A. Salomon; 400 bales, Train, Smith and Co.; 201 bales, Castle, Gottheil and Co.; 144 bales, Railroad Supply Co.

LEGHORN.—New York: 60 bales, Castle Gottheil and Co.

LIVERPOOL.—Boston: 1,201 bales, Train Smith and Co.; 24 bales, W. F. Corne; 8 bales, Robt. Bishop Manufacturing Co Philadelphia: 71 bales, British Bank of S America.

LONDON.—Philadelphia: 188 bales, Lyon and Co.

ROTTERDAM.—New York: 176 bales Millar and Co.; 137 bales, Castle, Gottheil and Co.

Waste Paper.

ANTWERP.—New York: 38 bales. Milla and Co.

GLASGOW.—New York: 170 bales, Milla and Co.; 54 bales, Lyon and Co.

LONDON.—New York: 119 bales, Lyon an Co. Boston: 367 bales, Train, Smith an Co.; 124 bales, American Express Co.: 20 bales, Wheelwright Paper Co. Philadelphia 215 bales, to order; 83 bales, Ladenburg Thalman and Co.

LIVERPOOL.—Boston: 87 bales, True an McClelland.

Wood Pulp.

ANTWERP.—New York: 50 bales, 10 tons F. Salomon and Co.; 250 bales, 25 tons Butterworth and Co.; 125 bales, 25 tons Castle, Gottheil and Co.; 430 bales, 90 tons R. Helwig.

COPENHAGEN.—New York: 360 bales, 45 tons, Bertuch and Co.; 1,330 bales, 180 tons, Lyon and Co. Boston: 3,088 bales, Bertuch and Co.; 400 bales, Proctor and Co.; 165 bales, to order; 104 bales, Aspergrain and Co.

HAMBURG.—Philadelphia: 1,200 bales, to order.

Bleaching Powder.

LIVERPOOL.—New York: 133 casks, J. L. and D. S. Riker. Boston: 248 casks, J. L. and D. S. Riker. Philadelphia: 92 casks, Jessup and Moore Paper Co.

Soda Ash.

LIVERPOOL.—New York: 97 casks, Heller and Merz Co. Boston: 36 casks, Warren and Co.

Caustic Soda.

LIVERPOOL.—New York: 50 bundles, J. L. and D. S. Riker.

Sizing.

HULL.—New York: 28 bales, Sanderson and Co.

LIVERPOOL.—New York: 142 bales, Gardner and Bro.

China Clay.

BREMEN.—New York: 123 casks, C. F. Zentgraf.

FOWEY.—Philadelphia: 575 packages, to order; 20 packages, W. H. and F. Jordan 430 packages, Baring Bros. and Co.; 48 tons, 11 cwts., Coulson and Co.; 47 tons, 16 cwts., Knight and Co.; 643 tons, 16 cwts., E. M. Pearson.

LIVERPOOL.—New York: 302 casks, Perkins, Goodwin and Co.; 100 casks, Hammill and Gillespie; 500 casks, Moore and Munger; 100 casks, Knight and Co.

Digitized by Google

BUSINESS CARDS.

Rates for Weekly Insertions of announcements of this character may be obtained on application to W. JOHN STONHILL & CO., 58, Shoe Lane, London, E.C.

WATER SUPPLIES
NORTON'S PATENT
Abyssinian and Artesian Tube Wells.
LE GRAND & SUTCLIFF,
Hydraulic Engineers,
Magdala Works, Bunhill Row, London

IMPORTANT TO STEAM USERS.
Boiler Composition
For Removal of Scale in Steam Boilers.
MANUFACTURED BY
JAMES EMMETT, Ltd., Reuben Street, LEEDS.

JOHN CALDWELL & SONS, Nat. Tel 390. T. A.: "Fents."
SUN MILLS, ANCOATS, MANCHESTER,
Wholesale Rag and Paper Stock MERCHANTS.
Buyers of Shirt Cuttings, Underclothing Cuttings, Tailors' Cuttings; also all grades of New Rag Cuttings
Warehouse Print Tabs, Fents, Twines, &c.
Terms—CASH. Bankers—L. & Y. Bank Shudehill.

R. W. SINDALL, F.C.S.,
15, Borough High St., London, S.E.
ANALYST and CHEMICAL ENGINEER.
WOOD PULP and PAPER TRADE EXPERT.
THE EXAMINATION OF PAPERS A SPECIALITY.

Telegraphic Address:—"RELIABLE." National Telephone, 1977.
J. BEAUMONT & CO.,
Wholesale Rag & Paper Stock MERCHANTS.
ALL GRADES OF COTTON RAGS, NEW RAGS, BAGGING, Etc.
Pump St., Oldham Road, MANCHESTER.

PAPER BAG MAKING MACHINERY
Latest Improvements.
BUMSTED AND CHANDLER,
Cannock Chase Foundry, Hednesford, Staffs.

CORNBROOK CHEMICAL Co.,
STOCKPORT LIMITED,
(Successors to ROBERTS DALE & Co., Manchester & Warrington
DRY & PULP COLOUR MANUFACTURERS
For the PAPER TRADE.
Paste Blues, Chromes, etc.
Any sample matched. Enquiries solicited.

C. D. EKMAN,
GRAVESEND,
Chemical Engineer,
SULPHITE PULP and PAPER TRADE EXPERT.
SCANDINAVIAN BUSINESS A SPECIALITY.

BF V BLEACHED SULPHATE,
Kommanditbolaget C. Fr. Wærn & Co.,
GOTHENBURG.

LIQUID DESTRUCTORS, Limited,
122, George Street, EDINBURGH.
TOTAL DESTRUCTION of SEMI-LIQUID REFUSE.
ENQUIRIES SOLICITED.

VAST SAVING IN FUEL AND LABOUR.
More Steam. Quicker Supply. Less Wear and Tear.

Cost repaid many times every year. The
MOST DURABLE & MOST PROFITABLE in Use.
Sole Makers
SUTCLIFFE BROS., Albert Works, Godley, near Manchester.

PATENTS, INVENTIONS, &c.

READERS of this Paper who have an **idea** for a **Patent**, or desire **information** or **Advice** in connection with Inventions, &c., should communicate with the Patent Editor, who will supply full particulars direct by letter, free of charge.

Address: *The World's Paper Trade Review*, 58, SHOE LANE, LONDON, E.C., and write on the left hand corner of the envelope the word "Patents."

Digitized by Google

British Imports of Foreign Paper.

The London Customs Bills of Entries show the following arrivals from the countries mentioned during the week ended Saturday last:—

Unprinted.

BELGIUM.—30 bales, Lavender Dk. Co.; 208 bales, 5 cases, 16 rolls, Sheldon and Co.; 36 bales, T. H. Lee; 106 bales, Barber and Co.; 49 bales, J. Grieg; 44 bales, 132 cases, J. Cockrill Line; 179 bales, Leach and Co.; 209 bales, 5 cases, J. Harrison; 25 bales, Thomas and Sons; 13 bales, R. Ulrich.

DENMARK. — 91 bales, R. Ulrich; 72 bales, Dowgate Dk. Co.

FRANCE.—10 bales, 50 rolls, J. Harrison; 8 cases, Paul and Co.; 1 case, Atkins and Nesbit; 8 cases, 33 rolls, B. and F. Wf. Co.; 5 bales, Hernu, Peron and Co

ITALY.—182 bales, 47 cases, R. Ulrich; 57 bales, Hernu, Peron and Co.; 1 bale, 9 cases, Hay's Wf.; 130 bales, E. and T. Pink; 37 bales, 2 cases, T. H. Lee; 295 bales, 32 rolls, Beck and Pollitzer; 56 bales, L. and I. D. Co.; 4 cases, Argo S. S. Co.; 37 bales, Barber and Co.; 75 bales, Elkan and Co.; 675 bales, 190 rolls, W. C. Batchelor; 260 bales, 72 rolls, Dowgate Dk.; 13 cases, Foley and Co.; 50 rolls, Blackwell and Co.; 12 cases, Craven and Co.; 26 rolls, Taylor and Co.; 23 bales, Trinity Wf. Co.

HOLLAND.—60 rolls, J. Owen; 488 bales, 10 cases, 170 rolls, Netherlands, S. B. Co.; 64 bales, Taylor Bros.; 3 bales, M. Benscher; 75 bales, Humphery and Co.; 129 bales, 60 rolls, Barber and Co.; 85 bales, 56 cases, Van Dam and Co.; 28 bales, Beer and Co.; 140 bales, Beck and Pollitzer; 105 bales, W. C. Batchelor; 25 bales, Mount and Co.; 596 bales, Hernu, Peron and Co.; 46 bales, Robinson, Roberts and Co.; 83 bales, Little and Johnston; 70 bales, Johnson and Sons.

JAPAN.—2 cases, Strome and Co.; 11 cases, Smith and Sons; 1 case, Harvey and Co.; 2 cases, Beck and Pollitzer.

NORWAY.—453 bales, 279 rolls, R. Ulrich; 58 bales, Hernu, Peron and Co.; 321 bales, 84 rolls, Johnson and Sons; 164 bales, 4 rolls, Taylor Bros.; 201 bales, J. Graves; 302 bales, 281 rolls, Trinity Wf. Co.; 15 bales, Barber and Co.; 116 rolls, Dowgate Dk.; 1,514 bales, 555 rolls, J. Spurling; 292 bales, 838 rolls, W. C. Batchelor; 67 bales, Foley and Co.; 42 bales, W. C. Mitchell.

SWEDEN.—120 bales, Davies and Royle; 120 bales, W. J. Morcom; 40 rolls, Stora Kopparbergs; 10 bales, 319 rolls, Dowgate Dk.; 20 bales, Capes and Self; 131 bales, 88 rolls, Beck and Pollitzer; 229 bales, 1 case, 454 rolls, Taylor Bros.; 125 bales, Crabb and Co.; 28 rolls, J. Graves; 20 bales, J. Spicer and Sons; 306 bales, W. C. Batchelor; 65 bales, Johnson and Sons; 6 bales, Foley and Co.; 32 bales, Vokins and Co.; 1,054 bales, 244 rolls, Trinity Wf. Co.; 42 bales, 5 cases, Bott and Co.; 186 bales, 61 rolls, M. D. Co.; 69 bales, Hernu, Peron and Co.; 67 bales, J. Spurling; 7 bales, Co-Operative Society, Ltd.

UNITED STATES.—152 bales, 5 cases, Lunham and Moore; 8 rolls, Taylor Bros.; 114 rolls, Mercantile Light Co.; 57 cases, Sheldon and Co.; 14 cases, Downings Despatch Co.; 5 cases, W. Dixon; 5 cases, Beck and Pollitzer.

Printed or Coated.

BELGIUM.—229 bales, 16 cases, J. Cockrill Line.

FRANCE.—21 cases, Mory and Co.; 10 cases, Symons and Co.; 2 cases, Walbaum and Fosetti.

GERMANY.—67 bales, 30 cases, Argo S. S. Co.; 4 cases, T. H. Lee; 86 bales, L. and I. D. Co.

HOLLAND.—53 bales, 2 cases, S. E. and C. D. Rly.; 80 bales, 46 cases, Netherlands S. B. Co.

JAPAN.—2 cases, L. and I. D. Co.

UNITED STATES.—66 cases, Peabody and Co.; 83 bales, 62 cases, Lunham and Moore; 50 cases, Rottman and Co.; 62 cases, Grape Nuts Co.; 9 cases, Sheldon and Co.; 20 cases, Claydon and Co.; 8 cases, Downings American Despatch.

Unclassified.

The paper imports (unclassified) at the principal provincial ports during the week ended Saturday last were:—

From Belgium, 1,667 bales, 5 cases, 34 rolls; Canada, 410 rolls; Denmark, 170 bales, 60 rolls; France, 433 bales, 94 cases; Finland, 1,038 bales; Germany, 1,238 bales, 44 cases, 35 rolls; Holland, 2,258 bales, 21 cases; Italy, 8 bales; Norway, 2,319 bales; Sweden, 2,332 bales, 1 case, 650 rolls; United States, 74 bales, 32 cases, 819 rolls.

Foreign Strawboards, &c.

The imports of straw, mill, and wood pulp boards, etc., at British ports during the week ended Saturday last were:—

STRAWBOARDS. — From Germany, 260 bales; Holland, 24,667 bales, 204 rolls; United States, 3,465 bales.

WOOD PULP BOARDS.—From Canada, 374 bales; Germany, 257 bales; Norway, 287 bales; Sweden, 802 bales; United States, 750 bales.

MILLBOARDS.—From Holland, 29,750 bales, 10 rolls.

PASTEBOARDS.—From Finland, 65 bales; Germany, 722 bales; Sweden, 27 bales.

CARDBOARDS.—From Germany, 65 cases; Belgium, 5 cases.

DURING 1903 7,308 tons of wood pulp were received at the port of Calais compared with 4,093 tons in the previous year. The shipments were made by Russia, Sweden, Norway and the United Kingdom.

THE United Kingdom imported 579 tons of rags from Calais last year, a decrease compared with the previous year when the quantity was 617 tons.

Digitized by Google

DIRECTORY.

Names and Addresses under these Headings will be charged for at the rate of 50/- per annum (52 insertions) for each card of two lines or under. Each additional line £1 per annum extra. Fresh headings are inserted when necessary.

ABYSSINIAN TUBE WELLS.

LE GRAND & SUTCLIFF, 125, Bunhill Row, London, E.C. . . . . Artesian Well Engineers.

ANALYSTS.

HURST, GEORGE H., F.C.S., 22, Blackfriars Street, Manchester. Speciality—Wood Pulp Sampling.

ARTESIAN WELLS.

ABUNDANT WATER SUPPLIES Co., apply to C. Isler and Co., Bear Lane, Southwark, S.E

ISLER, C. & Co., Bear Lane, Southwark, London, S.E.

CHINA CLAY.

BEST (JAMES) & SONS, Stoke-on-Trent. Specially Prepared China Clay for Papermakers. Stocks at Runcorn and Preston. Mines—Cornwall.

BODELVA & LANTERN CHINA CLAY Works. Stocks at Runcorn. Address J. Fletcher Pagen 82, Rumford Place, Liverpool. 7855

CHINA CLAY Co., 4, St. Ann's Square, Manchester. Mines: St. Austell, Cornwall. Stocks: Manchester, Preston, Runcorn, Leith. 8855

ROGERS, J. & Co., Truro, Cornwall.— Agents, W. G. Taylor and Co., Ltd., 83, Queen Victoria Street, London, E.C., and 29, St. Andrew's Square, Edinburgh.

W. SINGLETON BIRCH & SONS, Ltd., 15, Upton Street, Manchester. Mines: Rosevear, St. Austel, Cornwall.

COLOURS.

CARDWELL, J. L. & Co., Cromwell Buildings, 11, Blackfriars Street, Manchester. Specialities: Mineral Black, Ven. Red, Ochres, and Umbers.

HINSHELWOOD, Thos., & Co., Glasgow. Manufacturers of High-Grade Colours of all classes. Samples submitted or matched on application.

LEVINSTEIN LIMITED, Crumpsall Vale Works, Manchester. Warehouse, 21, Minshull Street. Manufacturers of Specialities for Paper dyeing in all shades. Blackley Blues, Scarlets, &c. Whitcol P.A. for sizing.

The VIA GELLIA COLOUR Co., Matlock-Bath. Colours in every variety. Mineral Black. Washed Golden Ochres and Umbers. Enquiries solicited.

MINERAL WHITE.

BELVOIR. Newark-upon-Trent. The first makers in Newark, 1850.

CAFFERATA & Co., Newark-upon-Trent. Established over 40 years. Largest makers of Mineral White in the Kingdom.

HOWE, John & Co., Carlisle.

RAGS.

CHALMERS, E. & Co., Ltd., Bonnington, Leith.

SIZING, etc.

The GROVE CHEMICAL CO., Ltd., Appley Bridge, near Wigan, Lancashire. Glues, Gelatine, Size, Albumenoid, Dextrines, Farina, Starch, Painters' Glue, etc.

STEEL & BRONZE TOOLS.

MAKIN, Wm. & SONS, Sheffield, Estab- lished 1736. Roll Bars, Plates; Cutter Knives, Doctor Blades, etc.

STRAWBOARD CENTRES.

BOYD, HART & CO., Makers of Round, Square, and Square Centre Shells, 21, Exchange Square, Glasgow. Telegraphic address: "Strawboard." 9341

TALC.

LASSALLE, TH., Montlucon, France.

GYPSUM & TERRA ALBA.

WINSER & Co. (GOTHAM Co., LTD.), 312, Deansgate, Manchester, and Kegworth Mills, near Derby. Established over 40 Years.

VENTILATING AND INDUCED DRAUGHT FAN MAKERS.

SAVE ON YOUR COAL BILL by using our Induced Draft Fan. At Oldham with three Boilers we are doing work that previously required four, and saving £28 a month in fuel. Write for particulars—SUTCLIFFE VENTILATING AND DRYING CO. Ltd., Cathedral Corner, Fennel Street, Manchester, Telephone No. 3920. Telegraphic Address: "VENTILABRO."

WOOD PULP.

ALSING & Co., Ltd., 110, Cannon Street, London, E.C. Agents for the well-known "K.K." Soda Pulp; also Sulphite and Mechanical.

GRANT, W. & Co., 4a, St. Andrew Square, Edinburgh. Agents for best shippers, Sulphite and Sulphate, Mechanical, Pine, Brown, Aspen.

WERTHEIM, A. & Co., Hamburg.

THE MANCHESTER ANILINE Co.,

20, High Street, Manchester.

SPECIALITIES:

MAGENTA, VIOLET, GREEN, METANIL YELLOW.

Mill-Hand Edition.

A Special Edition of *The World's Paper Trade Review* is published for supply only to bona-fide employees in Paper Mills.

The Annual Subscription is 6s. 6d., or 3s. 3d. for six months, PAYABLE IN ADVANCE.

New subscriptions are not accepted for any less period than six months, and must terminate at the end of a quarter, i.e., the last week in March, June, September, or December, and not at odd periods. Foreign subscribers must add, when remitting, the extra postage, i.e., 1s. 1d. for six months, or 2s. 2d. for the year.

The receipt of a copy in a COLOURED WRAPPER denotes the termination of a subscription.

Offices: 58, Shoe Lane, London, E.C.

Digitized by Google

A Printer's Failure.

Re J. M. MURPHY.

A sitting of the London Bankruptcy Court was held on Friday, April 22nd, before Mr. Registrar Brougham, for the public examination of this debtor, who carried on business under the style of Murphy Brothers, at Globe-mews, Globe-road, Kingsland, and resided at 61, Darenth-road, Stamford-hill. The receiving order was made last January on the petition of a creditor. A statement of affairs has now been filed showing unsecured debts, £4,332 13s. 10d.; partly secured creditors, £3,324 7s. 1d. (securities valued at £1,519); liabilities on bills £50, of which only £20 is expected to rank against the estate for dividend; and preferential claims, £230 16s. 4d. The assets, valued at £1,010 8s. 4d. comprise stock-in-trade, £12; fixtures and fittings, £218 10s. 6d.; furniture, £35; types, stereo blocks, etc., £666 18s. 10d.; office furniture. £45; good book debts, £12 19s.; and bad debts, £462 14s. 11d. of no realisable value whatever. The deficiency of £5,378 8s. 11d. is accounted for as follows, viz.: —Excess of liabilities over assets at 1st January, 1901, £1,896; net loss on the trading since that date, £1,058 14s.; bad debts, £462 14s. 11d.; household and personal expenses since 1st January, 1901, £780; interest on borrowed capital, £450; law and solicitors' costs, company promoters' expenses, writs, interest, etc., £350; depreciation in value of household furniture, £30; ditto in office fittings, etc., £56; ditto in types, etc., £14; and ditto in lease, machinery, and motive power, £281. In reply to Mr. G. W. Chapman, official receiver, the debtor said he started business as a printer in 1882 in partnership with Mr. W. H. Bowery, at Sheppey-yard, Minories. That business came to grief in 1889, and there was a dissolution; witness borrowed £500 from a relative and paid off the debts besides giving Mr. Bowery £100 for his interest in the business. He (debtor) subsequently continued the business alone, but in the name of Murphy Brothers, having plant to the value of £300, and a liability of £500 to the relative, who knew the position and had never pressed for repayment of the money. In 1895 witness removed from Sheppey-yard to the Alliance Mills, Stamford-hill, and twelve months later from thence to Globe Works, where he traded until December, 1903, when the business was put an end to by the landlord, who seized everything on the premises. Witness had been in difficulties for five years past owing to the fact that trade had fallen off. In addition, his machinery became old-fashioned, and he had to contend against severe competition. He had never made out balance sheets, nor had he ever ascertained his financial position. Having regard to the loan of £500 he had been insolvent since 1889, but apart from that his insolvency dated back some five years. Creditors had been pressing him for three years. An attempt was made to convert the business into a limited company, but the arrangement was not carried through. The idea was not to be able to raise capital for the business, but to get further credit from the mortgagees. Witness had drawn £5 a week from the business for his household and personal needs. The profits were in excess of that amount formerly, but had latterly fallen below it. The examination was ordered to be concluded. The following are the principal creditors, viz.:—

UNSECURED.

E Barnes, Hencage-lane, Leadenhall-street, E.C.	£16
John Brown, trustees of Osbaldeston-road, Stoke Newington	822
S. Brown, 2 and 4, New Inn-yard, Great Eastern-street, E.C.	124
S. A. Cattell and Son, Dorset-buildings, Salisbury-square, E.C.	48
T. D. Collins, 4, Ludgate-circus, E.C.	13
B. Delagana and Co., 11, Shoe-lane, E.C.	29
John Galpin, 78, Fleet-street, E.C.	170
Gardner, Middleton and Co., Red Lion-yard, Warner-street, Clerkenwell	14
C. Geard, 2, Maclean's-buildings, Fleet-street, E.C.	140
V. A. Goodman, Warwick-gardens, Kensington	123
Hopkinson and Cope, 103, Farringdon-road, E.C.	137
Hudson and Robinson, 21, Camomile-street, E.C.	29
T. J. Hunt, Fore-street-avenue, Moorfields, E.C.	11
J. Jenkinson, 49, Holborn-viaduct, E.C.	575
Samuel Jones and Co., 56, Carter-lane, E.C.	12
Lorrilleux and Co., Maclean's-buildings, New-street-square, E.C.	15
Kalm and Sohn, 67, Berners-street, W.	492
R. G. Gernon, Osbaldeston-road, N.	371
Mason and Mason, Ltd., Poppin's-court, Fleet-street, E.C.	89
Printing Arts Co., Ltd., Shaftesbury-avenue, W.C.	16
Smith and McLaurin, Ltd., Millekin-park, Renfrewshire	11
Stephenson, Blake and Co., 33, Aldersgate-street, E.C.	47
Union Co., Queen-street, E.C.	242
Wade, Malcolm and Co., Stonecutter-street, E.C.	63
C. H. Wagner, 67, Berners-street, W.	50
H. Wonfer, Royal crescent, Holland-park-avenue, W.	415
J. C. Yates, Bethune-road, Stamford-hill	26
Gifford and Archer, Enfield Town	10
W. Cullen, Leytonstone	12
A. M. Richardson, 80, Ludgate-hill, E.C.	12
Whitely and Co., Ltd., 23, College-hill, E.C.	30
Gas Light and Coke Co., Westminster	26

PARTLY SECURED.

Geo. Smythe and Son, 90, Fleet-street, E.C. (Security valued at £1,519.)	3,324

PREFERENTIAL.

Rent	130
Rates	23
Gas	25
Wages	75

STAGE PICTORIAL PUBLISHING CO., LTD.—Registered with a capital of £10,000, in £1 shares, to adopt an agreement with A. H. Vincent, and to carry on the business of photographers, photographic printers and dealers, art publishers, newspaper proprietors, booksellers, etc. No initial public issue. The first directors are A. H. Broadwell, P. J. Edwards, and W. E. Haenel. Qualification one share.

Digitized by Google

Bear in Mind

That money may be wasted in advertising as easily as in any other way. Success depends upon the selection of proper mediums. The best is a well established and influential paper.

☛ *A PROPER MEDIUM IS*

The World's Paper Trade Review,

which was established in 1879, and is the oldest weekly paper trade journal published in the United Kingdom.

WHAT THEY SAY ABOUT IT.

TESTIMONY OF ADVERTISERS:—

"It may interest you to know that our advertisement in your paper is bringing us a lot of orders for samples."—H. C. STANDAGE & Co., Birmingham.

"We have secured already several orders through the medium of your valued paper."—WOLF & Co., Water Lane, London.

"A journal in which we have great confidence . . . well aware of its circulation and ability."—The Grove Chemical Co., Limited.

"A widely circulating trade journal."—HARRY B. WOOD, Manchester.

APPRECIATION OF READERS:—

"We have for many years been, and still are, subscribers to your journal, which we are always reading with a great deal of interest, and which we consider to be one of the best journals of its kind in Europe.—BAMBLE AKTIE CELLULOSE FABRIK, Herre pr. Porsgrund, Norway.

"I take this opportunity to speak out that your journal has no equal of its kind in all countries."—M. BEHREND, Prince Bismarck's Paper Mills, Varzin, Germany.

"I appreciate the value of your journal, and find it of considerable benefit in my business."—H. A. Craigie, of S. D. Warren and Co., Cumberland Paper Mill, Me., U.S.A.

". . . . widely circulated, both in this country and abroad."—Munns and Longden, Solicitors to the British Wood Pulp Association.

"We take great interest in the *Review*, reading it carefully every issue, and you may be sure that its excellence is appreciated in this direction."—Perkins, Goodwin and Co., Paper Stock Merchants, New York.

"The best paper trade journal in the world."—W. H. WILES, Milton Paper Mills, Bowling.

OPINIONS OF CONTEMPORARIES:—

"A widely informed and well managed enterprise, of great value to exporters for its exact Market Reports and statistics of raw material."—*Central-Blatt fur die Deutsche Papier-Fabrikation*, Dresden.

"The leading European exponent of the paper trade."—*American Paper Trade and Wood Pulp News.*

"This weekly journal, published at London, is the most important of those which deal with the paper industry."—(Translation from) *La Papeterie*, Paris, the official organ of the French Wholesale Stationers' Association.

"It is the leading journal identified with the paper industry in England. . . . . Well and intelligently conducted."—*The Paper Trade*, Chicago.

"The completeness of its Market Reports has made it indispensable to the Paper and Paper Stock Trades, and its dependability is recognised throughout Europe and America."—*The Printers' Register* London.

Is your firm's Advertisement now appearing in this well-known trade Journal?

If Not, Why Not?

Please Note. **The World's Paper Trade Review** is subscribed for not only by Paper Makers, and the Home, Foreign, and American Paper Stock and Mill furnishing Trades, but by the Managers and Workmen in Paper Mills, for whom a cheap edition is published; and the advertisement tariff includes insertion in both editions.

☛ The *Review* is undoubtedly the best medium for all classes of advertisements relating to the paper, paper stock, engineering, and allied trades. Rates on application to the publishers, W. JOHN STONHILL & Co., 58, Shoe Lane, London, E.C.

Subscription £1 per Annum (post free) to all countries.

Digitized by Google

TARIFF CHANGES AND CUSTOMS REGULATIONS.

AUSTRALIAN COMMONWEALTH.

It has been decided that boxes of paper or cardboard (not being fancy) containing chocolate are admissible duty free as "other articles." Typewritten market reports, showing market fluctuations and shipping information are dutiable at the rate of 3d. per lb. as paper advertising matter.

BRITISH EAST AFRICA AND UGANDA PROTECTORATE.

The import duties on goods arriving in these districts were recently revised, but books, maps and printed matter are admitted duty free. On other goods, however, the old *ad valorem* duty of 5 per cent. has been doubled.

FRANCE.

The Board of Trade have received copies of certain circulars recently issued by the French Customs Department for the guidance of their officers, containing the following decisions relative to the application of the Customs Tariff. Paper mounted upon cloth in which the tissue can be seen, *i.e.*, tissues lined with paper upon one side only, are dutiable under No. 653 of the tariff as cotton tissues, plain, unbleached, bleached, dyed, or printed, according to the number of threads in a square of 5 mm. of the tissue, and according to the weight of tissue and paper together.

When the tissue has paper on both sides, duty will be levied at the rate provided for plain unbleached tissues, according to the combined weight of tissue and paper per 100 square metres. The rate of duty charged will be that imposed on tissues having 27 threads or less in a square of 5 mm.

SPAIN.

According to a Law published in the *Gaceta de Madrid*, for the 15th March, books of all kinds are exempted from the payment of Customs duty under the following conditions: -

(1) They must be written in the language of the country from which they are imported directly or with direct bill of lading, and must be published and printed in the same country.

(2) They must be the original works of a citizen of the country from which imported, who has secured copyright in them.

It is further provided that such duty-free admission shall be accorded only to importations from countries which have copyright treaties in force, and which reciprocally accord duty-free admission to books printed in Spain.

JAPAN.

Paper intended to be used for visiting cards is dutiable under No. 289 of the tariff, at the (Conventional) rate of 10 per cent. *ad valorem*.

Metal pencil holders are dutiable under No. 271 of the tariff at the rate of 20 per cent. *ad valorem* as manufactures of metal, and not under No. 298 as stationery.

CUBA.

The following is the substance of some decisions affecting the application of the Cuban Tariff, which were published in the Cuban *Gaceta Oficial* for January 28th:—

Letters or designs cut out of paper, covered with gold or silver leaf, are dutiable under No. 315 of the tariff, at the rate of 32½ per cent. *ad valorem*.

Envelopes of paper lined with cotton are dutiable under No. 154 of the tariff, at the rate of 13 dols. per 100 kilogs.

According to the new import tariff of the Cuban Republic, the following duties are in future to be levied on the goods enumerated below:—

Description of Article.	Former Rate of Duty.	Amount by which Duty has been increased.
Printing and Writing Paper.	Dols.	
Paper, in endless roll or in sheets, for white or coloured, unprinted, printing purposes	100 kilogs. 4·00	25
Common wrapping paper, in endless rolls or in sheets, white or coloured, not including manilla...	„ 2·50	25 „
NOTE.—Paper, except manilla, manufactured into bags of any kind, shall be dutiable, when without printing, with a surtax of 30 per cent. If printed, whether in sheets or bags, it shall be dutiable with a surtax of 50 per cent.		
Writing paper in sheets, ruled or not, unprinted, white or coloured, including blank books of the same	„ 8·00	15 „
NOTE 1.—Envelopes of all kinds	„ 8·00 With a surtax of 30	25 „
NOTE 2.—Blank books with printed headings	Dutiable under No. 156	
Paper, Printed Engraved, or Photographed.		
Books, bound or unbound, and similar printed matter	100 kilogs. 1·25	30 „
Headed paper, forms for invoices, labels, cards, and the like... ...	Kilog. 0·10	30 „
Prints, maps, charts, etc., drawings, photographs, engravings, and pictures, with graphs, chromolithographs, autographs, etc., printed from stone, zinc, aluminium, or other material, used as labels, flaps, bands, and wrappers for packages or other purposes—		
(a) Of one to three printings, inclusive, including articles printed solely in bronze,* but not including any article printed in whole or in part in metal leaf	„ 0·25	30 „
(b) Of four to seven printings, inclusive,* but not including any article printed in whole or in part in metal leaf ...	„ 0·30	30 „
(c) Of eight to thirteen printings, inclusive,* but not including any article printed in whole or in part in metal leaf	„ 0·40	30 „

Digitized by Google

Description of Article.	Former Rate of Duty.		Amount by which Duty has been increased.
(*d*) Of more than thirteen printings,* including all articles printed in whole or in part in metal leaf	,,	0·80	30 ,,
Wall paper, printed—			
(*a*) On natural ground... ...	100 kilogs.	4·00	30 ,,
(*b*) On dull or glazed ground...	,,	6·00	30 ,,
(*c*) With gold, silver, wool, or glass	Kilog.	0·27	30 ,,
Pasteboard and various Papers.			
Common packing paper, straw, sand or glass paper	100 kilogs.	1·75	30 ,,
Blotting paper	,,	2·30	30 ,,
Other paper not specially mentioned, including manilla paper and press copy books	,,	4·60	30 ,,
NOTE.—Manilla paper manufactured into bags of any kind, and † cigarette paper in books or rolls (*bobinas*), shall be dutiable with a surtax of 30 per cent.			
Pasteboard in sheets—			
(*a*) Cardboard paper, and fine, glazed, or pressed cardboard	100 kilogs.	3·50	30 ,,
(*b*) Other pasteboard	,,	1·00	30 ,,
Manufactures of pasteboard—			
(*a*) Boxes of common pasteboard lined with ordinary paper	,,	2·00	30 ,,
(*b*) Boxes of fine pressed or glazed cardboard, or with ornaments, or lined with fine paper, and articles not specially mentioned...	Kilog.	0 20	30 ,,
Paste and carton-pierre—			
(*a*) Unwrought	100 kilogs.	1·00	30 ,,
(*b*) Wrought, finished or not, including mouldings	,,	15.00	30 ,,
Type	Kilog.	0·15	25 ,,

* Bronze printing to be counted as three printings.
† The present additional duty does not apply to cigarette papers.

UNITED STATES.

Pasteboard made by pasting together numerous sheets of paper or board is dutiable under paragraph 407 of the tariff as a manufacture of paper, at the rate of 35 per cent. *ad valorem*.

Labels.—The provision for "labels" in the second section of paragraph 400 of the tariff, refers only to cigar labels.

It is notified that the provision for "penholders" in paragraph 187 of the tariff covers all articles known as such irrespective of the material of which they may be composed, and penholders of glass, whether plain or decorated, are dutiable under that provision. Glass pens and penholders made in one piece are, however, dutiable at the rate of 45 per cent. *ad valorem* under paragraph 112 as manufactures of glass. Paper used for the cover of books and pamphlets is dutiable as "printing paper" under paragraph 396 of the tariff, and not as "paper not specially provided for" under paragraph 402. Parchment paper with cotton back, paper being the component material of chief value, is dutiable at the rate of 35 per cent. *ad valorem* as a manufacture of paper, under paragraph 407 of the tariff, and not as parchment paper under paragraph 398.

Daily Papers on Ocean Liners.

A new international daily newspaper will be launched—that's the best word for it, says the *Editor and Publisher*—on May 15th. It will be printed simultaneously on most of the vessels of the transatlantic fleet while they are in transit. The news of the world, which will be supplied by wireless telegraphy, will be laid before the 20,000 to 30,000 passengers afloat at breakfast time every day this summer much in the form that the readers are used to finding it in New York or London. The paper will be made up like a regular city journal.

All the lines except one are now equipped with the wireless instruments. The ships of the American, Red Star, French and both German lines and some of the Atlantic Transport ships now issue a daily bulletin of news from a summary supplied them by a Bureau of Publicity which has its headquarters in Boston. The Cunard line gets its news from Reuter's agency. It is completely practicable to expand the present news service into as full a telegraphic report as a well-managed newspaper need have ashore, covering everything from the war to market reports.

The newspaper enterprise will be under the control of a single concern, which will establish an adequate plant on each of the ships. The editorial and business offices will be established either in New York or London. It is a matter of detail to supply each ship on its sailing with sheets on which the advertising matter has already been printed, so that the news only need be "set up" and printed on board ship. The promoters of the enterprise argue that a daily circulation of above 20,000 copies will attract a high class of advertising. The newspapers will be assured of a reader in practically every passenger, and ocean passengers, as a rule, are a good class to appeal to. Naturally hotels, theatres, resorts and railroads will figure largely in the advertising columns.

Each ship will require typesetting machines, a stereotyping plant, a good quick press, and the men to run them. On the first three days of a ship's journey eastward the news dispatches will be sent from New York. Then London will take up the service.

Pertaining to the project the *New York World* propounds this perplexing problem: "If the *Ocean Daily*, owned in America, were to print a libelous article on a German ship in French waters or on high seas, to what court would the aggrieved person look for redress?"

As a medium for all classes of advertisements the *World's Paper Trade Review* excels. It stands ahead of all contemporaries.

Digitized by Google

General Notes.

MR. H. J. STENT has severed his connection as agent and manager of the Inman-American Box Machine Co., 11-13, Whitecross-street, and has now established himself as machinery agent at 15, Clerkenwell-road, E.C.

WILL.—The estate of the late Mr. Douglas Gordon MacRae, of 3, Whitehall-court, and of the *Financial Times*, who died on the 2nd April, 1901, which was first valued at £13,025 4s. 7d., so far as could then be ascertained, has now been revalued at £394,295 3s. 11d.

MESSRS. CHAPMAN AND CO., wholesale and export stationers and envelope manufacturers, of Grange-walk, Bermondsey, have removed to more extensive premises at 35 and 37, Bermondsey-street, S.E. New and up-to-date machines for the manufacture of envelopes of all sizes and shapes have been put in.

STATIONERY TENDERS.—The Egyptian *Journal Officiel* contains an announcement that tenders will be received at the Central Office of the Ministry of Finance, Cairo, for the supply of stationery required for the Government Department during the years 1905, 1906, 1907. Persons wishing to tender should address themselves to the "Direction du Secrétariat" at the Finance Ministry, in order to consult the conditions and specification of the supply, and examine samples. Tenders will be received until the 2nd June, 1904.

MR. MAGNUS MACLEAN has an excellent article on the methods of the American people in regard to the education of the young, and the importance that is being placed upon technical education for those who propose taking up mechanical pursuits. Mr. Maclean says that for one thing, the old system of apprenticeship is fast disappearing, and a new one is taking its place, better adapted to modern conditions. No premiums are charged or accepted, and, what is even more remarkable from our point of view, a living wage is given from the first, and is advanced immediately a man shows that his work is worth more. At the works of Messrs. Crocker and Wheeler, Ampere, where motors, dynamos, etc., are manufactured, he says: "I was informed that they give college-trained men 33s. a week to start with; but in a very short time these receive more than the shop-trained apprentices, who began work four years earlier, just at the time when the students were entering college. At Schenectady the men taken on to the testing-staff are allowed 35s. a week for the first six months, and 41s. for the second, which is really higher than a mere living wage. In the Baldwin Locomotive Works I found the initial pay to be 30s. a week, rising during the two years' apprenticeship of the college men to 47s. This is a rate superior to that given the other apprentices. A further interesting detail bearing on this aspect of the question is, that the American employer always keeps an open door for the technically trained man without setting any particular age limit as in the case of those who have not been to college. While it is very questionable whether the latter would be taken on as apprentices after they have reached the age of 21 years, there is no doubt whatever regarding the graduate of any of the higher institutions even though he lengthen the period during which he is learning the scientific principles of his profession. So great is the demand in some places that the students are booked for engagements months before they graduate. This encouragement and co-operation of employers by no means ends with their willingness to give employment. They support the institutes and colleges in other ways. It is very common to find that most of the apparatus used in the laboratories of the latter have been presented by outside firms; and in addition to helping in this way with the equipment, many manufacturers give facilities to the students to make tests and examine work under actual commercial conditions. Indeed, shop-visiting frequently figures as part of the educational programme. Various railway companies even allow the students to travel on the engines to make diagrams or tests."

AN interesting demonstration has been given at Bristol of Pearson's automatic fire alarm at the works of a firm which has recently had an installation. A fire was kindled, and the heat from the flame, through one of the thermostats placed in the ceiling, telegraphed the alarm into the fire brigade station. Some sixty traders, including many leading merchants of the city, witnessed the experiment. Note was taken of the time which elapsed from the moment of the lighting of the fire to the turning out of the fire brigade in the station yard. The thermostat was set to give the signal when the heat reached 140 degs. F., and the expansion by heat completed the electric current. Methylated spirit being ignited the flames ascended three or four feet, but did not nearly reach the ceiling. In half-a-minute or a fraction less, the electric gong was heard sounding outside the building, and directly after the members of the amateur brigade connected with the establishment were on the spot with their hose and portable extincteur. In between four and five minutes from the ignition of the fire, water was drenching the windows of the factory from a pipe on the street level. The managing director of the establishment explained that the installation was effected with very little interference with his business. The demonstration was regarded as in the highest degree satisfactory. It should be explained that the thermostat can be set to give the alarm at any temperature so as to suit varying circumstances.

Digitized by Google

The World's Paper Trade Review

A WEEKLY JOURNAL FOR PAPER MAKERS & ENGINEERS.

[REGISTERED AT THE GENERAL POST OFFICE AS A NEWSPAER FOR TRANSMISSION IN THE UNITED KINGDOM.]

TWENTY-FIFTH YEAR.

VOLUME XLII. NUMBER 20. LONDON: MAY 13, 1904. PRICE SIXPENCE. EVERY FRIDAY.

Andrews & Co., Ltd.,

91, QUEEN VICTORIA STREET, LONDON,

And at MANCHESTER.

Telegrams:—"ARBORARIUS," London. Telephone:—835, Bank.

WOOD PULP AGENTS.

MAGO Finest Grade Moist Mechanicals, Hot and Cold Ground.

TOFTE Easy Bleaching Sulphite. (Except in Scotland).

TILSIT Extra Strong German Mitscherlich Sulphite

BÖHNSDALEN Sulphites, Strong News and Easy-Bleaching.

HAFSLUND SULFITFABRIK, Easy-Bleaching Sulphite.

WERMBOHLS FABRIKS AKTIEBOLAG, Easy-Bleaching and Strong Soda Pulps. (Except in Scotland).

GLOMMENS TRAESLIBERI, Hot-Ground and Extra Strong Moist Mechanical Pulp.

SIDEROSTHEN Anti-Corrosive Paint.

Digitized by Google

THE PAPERMAKERS' OPPORTUNITY.

[illegible]

COLONIAL & FOREIGN BUYERS.

[illegible]

GOOD BUSINESS.

[illegible]

[illegible]

THE LEADING JOURNAL

Published EVERY THURSDAY.

Paper-makers, Wholesale Stationers, &c.

[illegible]

AUSTRALIA, NEW ZEALAND, INDIA, AFRICA, CANADA, &c.

[illegible]

NEXT EXPORT ISSUE—including "BUYERS G[illegible]"—IN JUNE

ADVERTISEMENT RATES on Application to

W. JOHN STON[illegible] & Co., 58, SHOE LANE, LONDON, E.C.

SUBSCRIPTION

United Kingdom, [illegible]s. Colonial and Foreign, [illegible]s. per Annum Post Free.

The World's Paper Trade Review
A WEEKLY JOURNAL FOR PAPER MAKERS & ENGINEERS.

[Registered at the General Post Office as a Newspaper for Transmission in the United Kingdom.]

TWENTY-FIFTH YEAR.

VOLUME XLII.
NUMBER 20.

LONDON: May 13, 1904.

PRICE SIXPENCE,
EVERY FRIDAY.

Blotting Papers.

PHYSICAL TESTS FOR COMPARING COMMERCIAL VALUES.

By Henry P. Stevens, M.A., Ph.D., F.I.C.

[*All Rights Reserved.*]

In a recent work, entitled "C.B.S. Units and Standard Paper Tests," Messrs. Cross, Bevan, Beadle and Sindall have contributed very considerably to our knowledge of the physical *constants* of paper. Their researches led them, among other things, to determine the "bulking qualities" of a number of samples of paper from different sources. They succeeded in calculating a numerical value for the "bulk" of each paper examined, by which is meant the ratio of the total volume to the volume occupied by the fibre of the paper.

Mr. Clayton Beadle suggested to me that it would be of very considerable interest to examine a number of blotting papers in this respect, and to compare the values obtained with other measurements made to estimate their efficiency for the purpose in which they are employed. Botting papers act in virtue of the air spaces in the interstices between the fibres which by capillary attraction draw up and become charged with the liquid, such as ink, with which they are brought into contact. Provided the action is a purely mechanical one and that the ink has no further action on the fibres or mineral matter of the paper, the air spaces should not be appreciably clogged on drying, and the blotting paper should be as effective as it was before use. As is well known, this is seldom the case. A blot of ink on blotting paper, when dry, is frequently surrounded by a zone which is no longer absorbent, and such a paper soon becomes of no value after it has been a short time in use. I do not intend treating of this question here, but I raise it as it is of considerable importance in judging the value of a blotting paper.

In this article I shall record the examination of a number of well-known makes of blottings. The experiments fall under two heads:—Firstly (Series A), measurements of the physical properties, such as the specific gravity, by means of which we are able to arrive at the proportions of air spaces in the paper which would be available for soaking up a liquid like ink. *Caeteris paribus*, the higher this value the better the blotting paper, for the larger the proportion of air spaces we have in the paper—that is, the greater the bulking qualities—the more ink it can absorb. From the numerical results, we shall be able to arrange our papers in order of their superiority in this respect. (See Summary A.) Secondly, measurements devised for practically testing the absorbing power of the papers.

All these experiments have been carried out in duplicate—one set using water and the other writing ink. Stephen's blue black ink was taken as a standard ink and always from a freshly opened bottle, as writing ink has a tendency to undergo slight chemical changes after exposure to air for any length of time.

Digitized by Google

The usual method of testing is to immerse strips of the paper for a given time in the fluid, such as ink, and observe the height to which the liquid rises. The higher the liquid rises the greater the capillarity and the faster absorbs the ink. From these experimen we obtain another list of the papers in ord of their superiority. (See Summary F

SERIES A.

Columns: 1	3	4	5	5a	6	7	8	9	10	11	12
Reference No.	0·1 = thickness of 6 discs in mm. = 1 vol. unit.	Weight of 6 discs in grms.	Per cent Mineral by weight.	Weight of Ash of 6 discs.	Grammes per c.c.			Percentage by volume.			Ratio total volume to fibre volume.
					Pulp.	Fibre.	Mineral.	Fibre.	Mineral.	Air.	
1	·70	·482	13·7	·0755	·434	·385	·099	15·6	4·0	60·4	2·81
2	·84	·506	9·1	·0500	·403	·348	·055	36·5	2·2	61·2	2·74
3	1·08	·649	1·0	·0065	·401	·395	·006	39·6	0·2	60·2	2·53
4	1·06	·682	0·3	·0026	·653	·651	·002	42·7	0·1	57·2	2·34
5	1·04	·645	0·5	·0032	·620	·617	·003	41·1	0·1	58·8	2·43
6	1·03	·704	1·1	·0080	·684	·677	·007	45·1	0·3	54·6	2·22
7	1·01	·696	2·5	·0175	·719	·672	·017	46·1	0·7	53·2	2·16
8	1·32	·748	0·6	·0048	·567	·564	·003	37·6	0·1	62·3	2·66
9	·98	·562	0·7	·0027	·571	·567	·004	37·8	0·2	62·0	2·64
10	1·03	·636	0·5	·0034	·643	·640	·003	42·7	0·1	57·2	2·34
11	1·23	·771	0·8	·0061	·627	·622	·005	41·5	0·2	58·3	2·41
12	1·22	·706	0·4	·0049	·601	·600	·001	44·0	0·0	56·0	2·27
13	1·38	·742	0·7	·0056	·558	·554	·004	36·9	0·2	62·9	2·71

Mean Values.

	Series C		Series B	
	Water.	Ink.	Water.	Ink.
1	4·15	3·85	1·8	1·25
2	3·45	3·75	2·5	2·3
3	3·8	3·4	2·05	1·95
4	3·45	3·2	2·45	2·4
5	2·9	3·3	2·1	1·6
6	3·7	3·3	1·35	1·2
7	3·65	3·3	1·9	1·7
8	3·45	2·95	2·3	1·75
9	1·35	1·35	2·7	2·5
10	3·3	2·95	1·9	1·8
11	3·4	2·45	1·7	2·2
12	3·55	3·25	1·7	1·5
13	3·4	2·95	1·9	2·15

Summary.

Columns: 1	2	3	4	5	6	7	8
	A		B		C		
Order.	Relative qualities	Water	Ink.	Mean.	Water.	Ink.	Mean
1st	1	9	13	4	9	9	9
2nd	2	4	4	9	2	1	2
3rd	13	2	9	2	5	10	1
4th	4	8	2	13	1	2	10
5th	9	5	11	8	10	6	5
6th	3	3	3	11	4	5	4
7th	7	13	8	5	7	4	7
8th	5	} 7	10	10	6	7	6
9th	11	} 10	7	7	3	11	11
10th	10	1	5	12	4	3	3
11th	4	12	12	1	12	8	12
12th	12	11	1	3	8	13	8
13th	6	6	6	6	13	12	13

SERIES C.

Experiments.	Number 1.		Number 2.		Number 3.		Number 4.		Number 5.	
	Water.	Ink.	Water.	Ink.	Water.	Ink.	Water.	Ink.	Water.	Ink.
1	3·7	3·4	3·7	3·4	2·9	3·0	3·8	3·8	3·3	3·7	3·2	3·6	3·7	3·5	3·3	3·1	3·1	3·0	3·3	3·1
2	3·9	3·4	3·5	3·4	2·9	3·1	3·6	3·8	4·2	3·9	3·2	3·2	3·5	3·2	3·2	3·1	2·7	2·6	3·2	3·1
3	3·9	3·4	3·4	3·4	3·8	3·9	3·5	3·9	3·5	3·8	3·2	3·9	3·6	3·4	3·4	3·1	3·1	3·2	3·6	2·9
4	4·0	3·4	3·4	3·2	4·2	4·2	3·5	3·8	3·7	4·0	3·1	3·3	3·8	3·1	3·5	3·3	3·0	2·9	3·4	3·7
5	4·0	3·4	3·6	4·0	3·0	3·7	3·6	4·1	3·9	3·8	3·2	3·5	3·7	3·5	3·1	3·0	2·8	2·5	3·7	3·5
6	3·9	3·4	3·4	3·6	3·1	3·2	3·5	3·9	3·7	4·2	3·1	3·9	3·0	2·9	3·3	3·2	2·8	2·7	3·6	3·5
Means	3·9	3·4	3·6	3·1	3·4	3·6	3·6	3·9	3·7	3·9	3·2	3·6	3·6	3·3	3·3	3·1	2·9	2·9	3·5	3·4

Digitized by Google

These tests are from Series B. I have also tried a new method of testing by means of blots. Each blot was produced by dropping the same volume of fluid on the paper and then measuring it across in two different directions from which the area of the blot could be calculated. Then, taking into consideration the thickness of the paper, I determined the volume of the paper wetted by the blot. As before, from the numerical results we obtain a list of papers in order of their superiority in this respect. (See Summary C.)

The determination of "bulking" properties or proportion of air spaces is carried out exactly as described in the "C.B.S. Units and Standard Paper Tests." I have retained the same arrangement and used the same figures for heading the columns. For complete description and full details I refer the reader to the above publication, and will here content myself by pointing out briefly the significance of the various columns:—

Column 1 gives the reference number of the different papers. The headings of columns 3 and 4 explain themselves. Five discs were stamped from the paper and each had an area of exactly 1,000 sq. m.m. The thickness was measured by a micrometer gauge, and the discs were then weighed, after which they were burnt to ash. The weight of the ash in each case is given in column 5a, and this reckoned as per cent. on the weight of paper in column 5. Column 6 represents the "apparent specific gravity" of the paper, and is got by dividing the figures in column 4 by those in column 3.

Of the figure for "apparent specific gravity" or weight per c.c. part is due to the fibre and part to the mineral matter. The latter is calculated from column 5 and is found in column 8, which subtracted from the figures in column 6 gives the weight of fibre per c.c. in column 7. If we know the actual specific gravity of the fibre substance we can easily calculate the actual volume it occupies, and thence the volume it occupies in the paper. This is given in column 9, which is obtained by multiplying the figures in column 7 by 100 and dividing by 1·5. This latter figure being taken as representing the actual specific gravity of the fibre. By a similar calculation we obtain column 10, giving the per cent. by volume occupied by the mineral, the actual specific gravity of the latter being taken as 2·5.

We now know what percentage of the volume of the paper is occupied by the fibre (column 9) and by the mineral (column 10), the remainder must be air space. This is given in column 11, the figures being obtained from the corresponding ones in columns 9 and 10 by adding them together and subtracting from 100. Finally we have column 20, in which the figures in column 11 are represented as ratios. This being a better mode of expression for our purpose of the proportion of air space or "bulk" of our papers. It only remains to tabulate the papers in the order of values of the figures given in column 11 to appreciate their relative merits on this method of testing.

Coming now to the second method, in which we measure the distance water or ink will rise in a strip two centimeters wide in one minute. The mean of six experiments both with water and ink is given. (Series B.) Here we are not so much dealing with the capacity of the paper for absorbing ink, but rather with the rapidity with which the absorption takes place. The value for each paper will depend not on the proportion of air spaces or "bulk," but on the shape and size of the air spaces, as these will have a predominating influence on the capillarity. This method may perhaps be regarded as the usual or standard one; at least, it is the one generally employed and in that it measures the capillarity with but little reference to the bulking qualities, I am inclined to regard it as of only secondary importance. To take these bulking qualities into consideration by means of a practical test, the blot method of testing was devised. Blots were made by dropping each time exactly one-tenth of a centimetre of liquid from a pipette into the paper. After two minutes the blot was measured across in two directions at right angles to one another. As before, six tests were made, using both water and ink on each paper. The mean values are tabulated, as before, after allowing for the thickness of the paper. This was done by multiplying the area of the blot, calculated from the mean diameter, by one-fifth of the figure found in column 3, Series A. Finally, the results were arranged according to their numerical values. The smallest figure represents the best paper as obviously the best paper, *caeteris paribus*, will go furthest and a smaller quantity of it will serve to "mop up" the same quantity of ink.

I have given some of the figures obtained in these experiments in full (Series C), so that the reader may get some idea of the accuracy with which they have been carried out. The last tables show a summary in which only the mean values are given. The first column gives the order in which the papers are arranged. The second (A), the bulking qualities according to Series A, arranged in order of magnitude. The third, fourth and fifth (B) give the results of the experiments in which the heights to which the liquid rises in strips are measured and arranged in order of magnitude. The first of the three columns embodies the experiments with water, the second with ink, and the third represents the mean of the two preceding ones.

Finally, the sixth, seventh and eighth columns (C) correspond exactly to the third, fourth and fifth, except that the former represent the results of the experiments with the blots and the figures are in the reverse order, that is to say, starting with the smallest and ending with the largest for the reasons already given above.

In conclusion, I should like to make a few remarks with respect to the significance of these figures given in the Summary. If we compare together the first two columns of B or C, it is astonishing to note the difference the order the papers take accord-

Digitized by Google

ing as the experiments were carried out with water or ink. This is especially the case in B. Compare, for instance, papers No. 13, 8 and 11. The reason of this is not easily explained. The experiments with ink were carried out in exactly the same manner as those with water. It appears to point to some irregularity in the action of the ink, which does not spread in the normal manner that water does. This has probably some connection with the inactive zone mentioned in the introduction to this paper. Papers Nos. 13 and 8 are of the same make, and the same applies to Nos. 12 and 4. We should therefore expect to find them or pairs together in the lists we are considering. However, we only find this to be the case with numbers 13 and 8 in C. In the same series 12 and 4, the other two papers of the same make, are quite apart, although separated by about the same interval in all three columns. In B, columns 8 and 4 both place 13 and 8 and also 12 and 4, are spaced one apart in the columns although 13 and 8 come together in column 5, which, appears to be most of the four. 13 and 12 appeared to be a peculiar although considerable interval.

Turning now to column 2 A, which gives the bursting qualities in lbs. per inch of the papers, it will be noted that one another in the order of magnitude, as far as can be judged in the determination of bursting qualities per inch. Series 4 we have the most reliable test for the determination of bursting papers. Now, in this series a relation between the bursting qualities and the number of beatings given is noted. While the maximum bursting qualities seems to be obtained on the schemes 4 and 6 depending on the nature of the pulp for beating, a fact I deprecate as the paper facilities are never a station to put a thing

The Paper Trade in Roumania.

the administrative department, and 8 Roumanians, 136 foreigners, and one Jew the manufacturing departments; 748 of t men and 128 of the women employed we aged 16 years or upwards. The day's wo consists of over ten hours in two of t mills, and varied between eight and ten the others. The value of the raw materi employed last year reached a total £72,900, of which £42,000 worth came fro abroad. The paper, etc., made was valu at £240,000, and included 4,148 tons of wr ing paper, valued, with the printings, £116,000; 2,684 tons of wrappings, val £38,000; 1,261 tons of boards, value £13,50 and paper bags, £13,500 worth.

The wood pulp imported in 1903 was 3,6 tons, but the Letea Paper Mills Co. h lately constructed a pulp works at a cost nearly £2,000, which it is expected will, future turn out all the pulp required by t Roumanian mills. In 1903 the consumptio of paper and boards in the country was es 2,762 tons, nearly all imported, but last ye it was 3,000 tons, of which 1,500 tons we made in Roumania. Eighty per cent. of t local demand is for wrappings and printing and, as most of this is made in the countr itself it is expected that the Customs impo duties of these sorts will be diminished fro about 2s. per cwt. to 1s., or 5s. per cwt. t the latter, and to 6s. instead of 7s. 6d. on t former kind. It is not likely however, th the old Protections, duties of other class of paper will be modified. As far as t principal paper-making industries are co cerned, there are practically only five firm in this country which on the State capitali test by engineers mean the total capit employed in the firm which is £31,000. Th paper mill of the concern was valued i 1901 at £142,000. Last year's production of this mill was 2,500 tons, being 1,500 tons less than in 1901. 2,52 tons were sold, and the work with manufacturers re £2,50 ; produce. The nominal capit is £72,000, of which £112,000 is taken up, an of this amount a the rate of 8 per cent was paid, the net profits for the year amount to £5,000.

Among the paper dealers stationers etc. whose premises were destroyed by the recen great fire in the city of London were Messrs. Hansons, stationers Ritchi and Ridout, the waste paper manufac turers; Small Paper Co., paper manufac turers; Whitefriars, and Brow Brothers stationers to the Spanish and Co. printers; Waterlow, Bates and Co stationers, Government Printing Office Digest of Statutes and publishers Wyman and Sons, printers Speed &c.

Mr. Arthur White has appointe [illegible] Commissioner in Indiana. H [illegible] next [illegible]

Messrs. Lawrence, White, Smith, & Co [illegible] Paper [illegible] Supplies.

Digitized by Google

J. M. VOITH,

Papermakers' Engineer & Turbine Builder

HEIDENHEIM - on - BRENZ.

Every Description of Machinery

FOR PAPER AND PULP MILLS.

SPECIALITIES:

Paper Machines.	Basalt Lava Beater Rolls.	Nacke Refining Engines.
Board Machines.	Dr. Wurster's Pulping Engines.	Strainers & Knotters.
Calenders.	Large Four-sided Cutters, with Mechanical Feed.	Hydraulic Presses.
Bischof's Reelers.		Packing Presses.
Angle Cutters.		Stuff Pumps and Water Pumps.
Rag & Rope Engines.		
Beating Engines.		

TURBINES suitable for all Falls and Quantities of Water.
TURBINE GOVERNORS of utmost Precision.
1,502 TURBINES, with 244,882 h.p., in use and on order.

Sole Agents for the United Kingdom and Colonies:—

J. MARX & Co., 133—139, Finsbury Pavement, E.C

TRADE MARK.

LÖVENSKIOLD-FOSSUM,

SKIEN, NORWAY.

EXPORTER OF

Moist Pine Pulp.

Sole Agents for England and Ireland:—
HANS DESSEN & CO.,
2, Great Winchester, Street, LONDON, E.C.

Sole Agents for Scotland:—
W. GRANT & CO.,
4a, St. Andrew Square, EDINBURGH.

F. D. TAYLOR and Co., 50, CANNON ST., LONDON, E.C.

Telegraphic Address: "PULPINESS," LONDON.

Agents and Importers of All Kinds of Papermaking Materials.

WOOD PULPS: Sulphite, Soda, and Mechanical.

ALSO

CHEMICALS, COLOURS, LOADINGS, SIZINGS, &c.

SAMPLES ON APPLICATION.

Digitized by Google

Papermakers and River Pollution.

Local Government Board Enquiry at Darwen.

On Friday, at Darwen, Mr. A. A. G. Malet, A.M., M.I.C.E., the Inspector appointed by the Local Government Board, held an inquiry with regard to an application made to the Board by the Joint Committee of the River Ribble for leave to take proceedings against the Darwen Paper Mill Co., Ltd., in respect of their Spring Vale Mill and Darwen Paper Mill, for offences alleged to have been committed against the Rivers Pollution Prevention Act, 1876.

Mr. Wilson (Preston) appeared for the Ribble Board, and Mr. F. G. Hindle (of the firm of Hindle and Son, Darwen) for the Paper Company.

Evidence having been given as to the pollution of the River Darwen on the 10th of March last by the effluent issuing from the company's paper works at Spring Vale and Darwen Mills, Mr. Hindle addressed the Inspector on behalf of the company, and admitted that the Ribble Board had ground for complaint, and did not dispute that they were justified in taking this action, but expressed the hope that on the company paying the costs of the present proceedings the Ribble Board would not think it necessary to take further action, so long as the company took care that nothing of the kind occurred again.

At the conclusion of the enquiry, which lasted about three hours, the Commissioner intimated that he would view the works, and afterwards make a report to the Local Government Board.

British Papermakers in the States.

Mr. William H. Goodenough.

Many British papermakers hold responsible positions in American paper mills. Some particulars appear in a recent issue of the New York *Paper Trade Journal* concerning the career of Mr. William H. Goodenough, the newly appointed superintendent of the Lee Paper Company, Vicksburg, Mich., who is also a prominent stockholder and one of the directors of the concern. Mr. Goodenough, says our contemporary, is an Englishman by birth, having began his earthly existence in the town of Maidstone, Kent County, December 7th, 1849. His early schooling was limited, for at the age of thirteen years he began the battle of life for himself by going to work in the mill that produced the justly famous Whatman drawing paper. For seven years he remained with this institution, and at the age of twenty left his native land and went to Holyoke, Mass., and secured employment with the Whiting Paper Company, remaining seven years in its employ. In 1876 he took charge of the finishing room in the old Charles Megargee Mill in Philadelphia, but later returned to Holyoke and opened a vat mill for the Whiting Paper Company and the L. L. Brown Company. He also held positions of trust with the Keith Paper Company, Turners Falls, Mass., and the Springdale Paper Company at Westfield, Mass., and was for ten years superintendent of the Chester Paper Company at Huntington, Mass. In June, 1893, Mr. Goodenough left Massachusetts and went West to De Pere, Wis., where he was made superintendent of the Shattuck and Babcock Company's paper mill at that point, the plant later on passing into the hands of the American Writing Paper Company. He remained with the trust until this year, when he became interested in the Lee Paper Company, and will have charge of its big mill now in course of construction at Vicksburg, Mich., 14 miles south of Kalamazoo. Mr. Goodenough is in every sense of the word a self-made man. He has made a success of his life work, and is counted as one of the best posted makers of high grade papers in America. Though never truckling to labour, he always has an eye open to bettering the conditions of his help, and his sterling qualities have gained for him the love and respect of those who have worked under him in the past.

CUSTOMS DECISIONS.—The following decisions have been handed down by the United States Board of General Appraisers:—Manufactures of paper, from Hugo A. Schlesinger, Berlin, exported December 21st to February 11th, 1904, entered at Philadelphia (file Nos. 8,165, 8,225, 8,288 and 8,391, O. P.). Findings of Howell, G. A.: 337,925 pieces 1 pound coffee bags, 6 × 9 inches, embossed pergamyn, lined with cellulose paper, no printing, weight 15 pounds per 1,000 bags; entered at 7 marks per 1,000. No advance, 28,000 one-half pound coffee bags, 5 × 7 inches, embossed pergamyn, lined with cellulose paper and printed in one colour, weighing 9½ pounds per 1,000 bags; entered at 6.80, advanced to 7 marks per 1,000. 15,300 1 pound coffee bags, 6 × 9½ inches, embossed pergamyn, lined with cellulose paper and printed in one colour, weight 14½ pounds per 1,000; entered at 7.75, advanced to 8 marks per 1,000. 6,150, 6½ × 9½ inches, embossed patent algymyn, paper lined, grease proof pergamyn, 20 pounds per 1,000 bags; entered at 20.15 marks per 1,000. No advance. 5,700, 5½ × 7½, ditto, 14 pounds per 1,000; entered at 14.20 marks per 1,000. No advance. 5,000, 4½ × 6½, ditto, 9½ pounds per 1,000; entered at 10.90 marks per 1,000. No advance. 400, 6 × 9, ditto, 17 pounds per 1,000; entered at 18.90 marks per 1,000. No advance. And similar goods. Prices are net, packed.

As a medium for all classes of advertisements the *World's Paper Trade Review* excels. It stands ahead of all contemporaries.

Digitized by Google

Northfleet Paper Mills, Ltd.

The annual meeting of the above company, formerly the Ekman Pulp and Paper Co., Ltd., was held at the London offices (57½, Old Broad-street, E.C.) on Thursday, the 5th inst.

The company's accounts covered a period of fourteen months ended February 29th, 1904. Manufacturing operations at both mills—Northfleet and Ilford—showed very successful results, and a dividend of 5 per cent. free of income tax, for the period mentioned was agreed to. A sum of £2,000 was transferred to reserve account, and £1,265 7s. 8d. carried forward to new account.

The company, unfortunately, was involved in a law suit last year. The judgment by consent was £10,000, payable by instalments, the final instalment falling due in 1909, and the expenses of the law suit and alterations of capital £6,777 1s. 3d. Against the amount of judgment a first instalment of £1,000 has been paid, and against the expenses, etc., £1,028 4s. 4d.

Arrangements had been carried through for a reduction in the company's capital, which now stands at £25,000 5 per cent. preference shares, and £100,000 "A" shares of £8 each, of which there has been issued £10,000 preference and £100,000 "A" shares. There are also £140,000 4½ per cent. first mortgage debentures.

The mills are busy on specialities, and the profitable results are highly creditable to Mr. Barnes, the London representative, to Mr. James Grant, the manager, and also to the mill staff, of which Mr. John White, papermaker, is the head.

British Imports of Foreign Paper.

The London Customs Bills of Entries show the following arrivals from the countries mentioned during the week ended Saturday last:—

Unprinted.

AUSTRIA-HUNGARY.—34 bales, Beck and Pollitzer.

BELGIUM.—6 bales, Thomas and Sons; 50 cases, Siemens Bros.; 101 bales, 164 cases, J. Cockrill Line; 17 cases, T. Palmer; 519 bales, 6 cases, Sheldon and Co.; 40 bales, 3 cases, T. H. Lee; 128 bales, 10 rolls, Leach and Co.; 37 bales, 50 cases, J. Harrison; 93 bales, Claydon and Co.; 34 bales, Barber and Co.

CANADA.—476 rolls, Taylor Bros.; 195 rolls, Beck and Pollitzer.

DENMARK.—232 bales, R. Ulricb.

FRANCE.—12 cases, Paul and Co.; 3 cases, B. and F. Wf. Co.

GERMANY.—15 bales, 285 rolls, Dowgate Dk.; 351 bales, 4 cases, R. Ulrich; 10 bales, 20 rolls, Hernu, Peron and Co.; 733 bales, 24 rolls, W. C. Batchelor; 62 bales, 159 rolls, Beck and Pollitzer; 25 bales, 13 rolls, Taylor Bros.; 156 bales, 26 cases, Craven and Co.; 94 bales, L. and I. D. Co.; 213 bales, 5 cases, Foley and Co.; 352 rolls, Blackwell and Co.; 47 bales, E. and T. Pink; 44 bales, 3 cases, T. H. Lee; 760 rolls, S. E. and C. D. Rly.; 51 bales, Argo S. S. Co.; 252 bales, J. Spurling: 7 bales, J. Graves.

HOLLAND.—824 bales, 51 cases, Netherlands S. B. Co.; 53 bales, Robinson, Roberts and Co.; 22 bales, S. E. and C. D. Rly.; 245 bales, Van Dam Co.; 31 bales, Beer and Co.; 198 bales, Dowgate Dk.; 31 rolls, Taylor Bros.; 58 bales, 120 rolls, Barber and Co.; 39 bales, T. H. Lee; 46 bales, W. C. Batchelor; 20 bales, Mount and Co.; 52 bales, 74 rolls, Hernu, Peron and Co.; 41 bales, Little and Johnston.

JAPAN.—10 cases, Pope and Co.; 9 cases, Pickfords, Ltd.; 11 cases, L. and I. D. Co.

NORWAY.—12 bales, Carter, Paterson and Co.; 8 bales, 9 rolls, Brown, Brough and Co.

SWEDEN.—125 bales, 184 rolls, Mohnson and Sons; 74 bales, 693 rolls, Taylor Bros.; 20 bales, Millwall Dk.; 3 bales, Phillips and Graves; 177 bales, 49 rolls, J. Spurling; 120 bales, J. Greig; 448 rolls, Dowgate Dk.; 200 bales, 28 rolls, M. D. Co.; 577 bales, 1,353 rolls, Trinity Wf. Co.; 17 bales, 39 rolls, Relph and Co.; 128 bales, 39 cases, 196 rolls, Beck and Pollitzer; 195 bales, Claydon and Co.; 28 bales, 10 cases, 132 rolls, Tegner, Rice and Co.; 47 bales, 300 rolls, McDougall and Bronthron; 15 bales, Hernu, Peron and Co.; 470 bales, W. C. Batchelor.

SPAIN.—3 cases, Tingle, Jacobs and Co.

UNITED STATES.—2 rolls, Blackwell and Co.; 12 bales, American Express Co.; 66 cases, W. Dixon; 3 cases, 627 rolls, Taylor Bros.; 100 cases, Field and Co.; 1 case, Meadows and Co.; 4 cases, Sheldon and Co.; 81 bales, Lunham and Moore; 108 rolls, American Express Co.; 13 cases, Beck and Pollitzer.

Printed or Coated.

BELGIUM.—124 bales, 2 cases, J. Cockrill Line.

FRANCE.—1 case, Coppo and Co.

GERMANY.—67 bales, 8 cases, Argo S. S. Co.; 28 bales, 25 cases, L. and I. D. Co.

HOLLAND.—122 bales, S. E. and C. D. Rly.; 94 bales, Netherlands S. B. Co.

UNITED STATES.—8 cases, Davies, Turner and Co.; 78 cases, W. Dixon; 4 bales, 13 cases, Sheldon and Co.; 16 cases, Lunham and Moore; 3 cases, Lipton; 7 cases, Beck and Pollitzer; 21 cases, Peabody and Co.

Unclassified.

The paper imports (unclassified) at the principal provincial ports during the week ended Saturday last were:—

From Austria, 169 bales; Belgium, 1,241 bales, 52 cases, 21 rolls; Canada, 1,015 rolls; Denmark, 330 rolls; France, 286 bales, 107 rolls; Finland, 44 bales; Germany, 909 bales, 27 cases, 575 rolls; Holland, 1,056 bales, 66 cases, 505 rolls; Italy, 67 bales; Norway, 711 bales, 188 rolls; Sweden, 2,077 bales, 989 rolls; United States, 96 bales, 15 cases, 481 rolls.

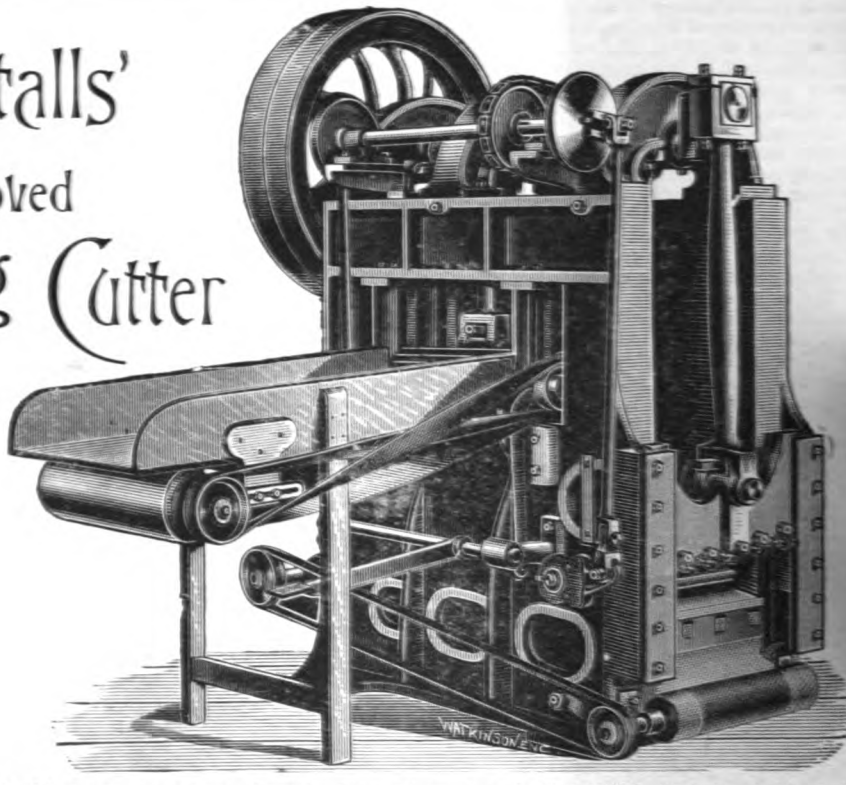
Digitized by Google

BENTLE

Papermak

BURY, n

Nuttalls' Improved Rag Cutter



This Machine has now been Greatly Strengthened and Simplified, and its Output C Increased. It is Equally Effective upon the Strongest and Lightest Materials, and Every Class of Stock.

Sole British Makers of

NO WELL EQUIPPED

FULL PARTICU

Digitized by Google

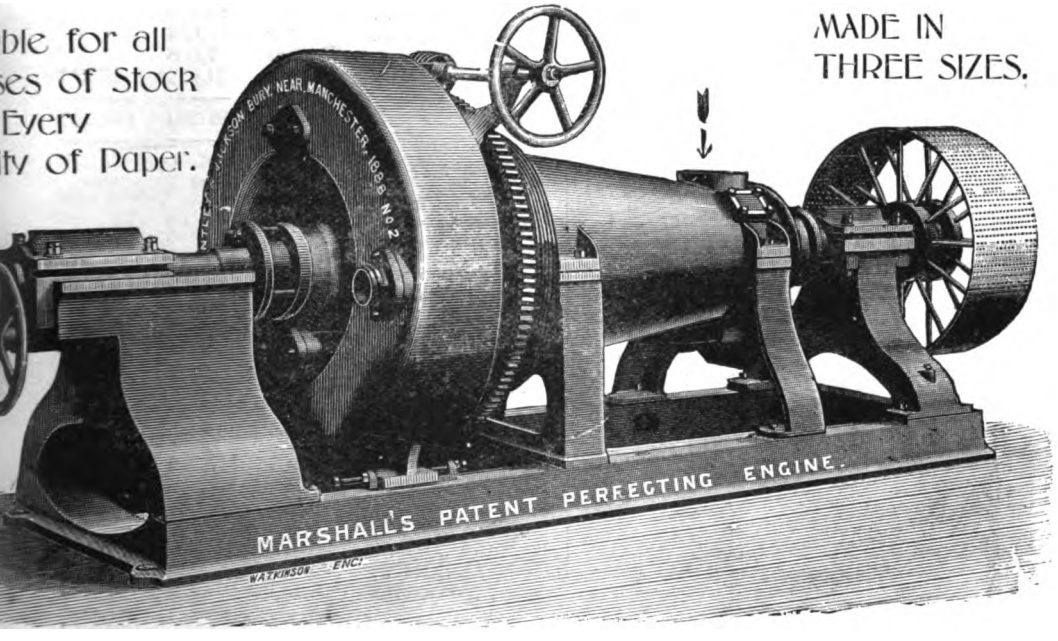
JACKSON
LIMITED.

ngineers,
ANCHESTER.

Marshall's PATENT Perfecting Engine

ble for all
ses of Stock
Every
ty of Paper.

MADE IN
THREE SIZES.



This Engine will produce a Better Finished, Stronger, and More Even Sheet of Paper from the same Materials than can be produced by any other Mechanical Process, and at the same time will REDUCE the TIME and POWER Required for Beating.

OBURN-TAYLOR Machine.

. SHOULD BE WITHOUT.

APPLICATION.

Digitized by Google

FOREIGN PAPER IN GREAT BRITAIN.

The total imports of foreign paper, boards, etc., during April and January-April of this and the two preceding years were as under:—

TOTAL IMPORTS.

April,	1904	592,110	cwts.	£308,304
,,	1903	576,305	,,	378,526
,,	1902	567,693	,,	303,076
Jan.-April,	1904	2,372,902	,,	1,616,516
,,	1903	2,306,480	,,	1,500,041
,,	1902	2,120,619	,,	1,480,001

The following is the official classification of paper, etc.:—

UNPRINTED.

April,	1904	344,239	cwts.	£272,658
,,	1903	323,404	,,	249,521
,,	1902	295,991	,,	258,693
Jan.-April,	1904	1,424,727	,,	1,125,766
,,	1903	1,308,857	,,	1,058,824
,,	1902	1,197,689	,,	1,003,251

"ON REELS."

April imports:—

	1902. Cwts.	1903. Cwts.	1904. Cwts.
Sweden	19,161	30,538	49,388
Norway	21,925	23,590	29,245
Germany ...	4,420	4,207	14,807
Holland	4,274	1,696	5,221
Belgium ...	718	505	940
United States ...	20,247	28,059	16,578
Other countries	10,298	6,922	1,665
Totals	81,043	95,517	117,832

	1902. £	1903. £	1904. £
Sweden	13,466	19,342	35,168
Norway	14,348	13,966	19,353
Germany ...	7,810	3,426	8,199
Holland	3,549	698	4,862
Belgium	701	451	1,040
United States ...	10,599	15,545	9,363
Other countries	6,081	3,863	1,224
Totals	56,554	57,291	79,209

January-April imports:—

	1902. Cwts.	1903. Cwts.	1904. Cwts.
Sweden	103,076	130,091	169,706
Norway	102,542	104,326	112,772
Germany ...	16,820	19,252	44,550
Holland	22,300	21,314	19,338
Belgium	3,366	2,574	3,386
United States ...	91,106	88,038	73,708
Other Countries	32,580	24,075	25,182
Totals	371,800	389,470	448,622

	1902. £	1903. £	1904. £
Sweden	62,372	86,869	114,979
Norway	65,828	67,108	72,008
Germany ...	19,844	15,386	26,200
Holland	19,563	17,815	16,901
Belgium	4,153	2,827	3,622
United States ...	52,164	50,255	41,429
Other Countries	21,704	15,272	10,556
Totals	245,628	256,532	291,660

NOT "ON REELS."

April imports:—

	1902. Cwts.	1903. Cwts.	1904. Cwts.
Sweden	52,253	66,757	59,18
Norway	38,507	46,372	48,98
Germany ...	31,003	30,464	24,61
Holland	40,469	42,303	42,50
Belgium	18,449	21,734	21,11
United States ...	10,660	6,777	11,62
Other countries	23,617	13,480	18,33
Totals ...	214,948	227,887	226,45

	1902. £	1903. £	1904. £
Sweden	39,412	46,168	42,61
Norway	26,760	30,364	32,97
Germany ...	31,120	30,495	24,41
Holland	40,426	36,125	38,85
Belgium	20,720	21,028	22,31
United States ...	11,798	7,018	10,03
Other countries	31,908	21,034	22,24
Totals	202,139	192,230	193,44

January-April imports:—

	1902. Cwts.	1903. Cwts.	1904. Cwts.
Sweden	191,327	242,535	246,98
Norway	193,313	175,196	225,40
Germany ...	100,863	115,379	105,34
Holland	141,491	177,298	173,06
Belgium	73,872	86,900	95,66
United States ...	41,389	36,300	45,13
Other countries	83,574	85,681	84,50
Totals	825,829	919,387	976,10

	1902. £	1903. £	1904. £
Sweden	138,085	167,296	176,14
Norway	140,194	117,690	150,13
Germany ...	98,822	115,025	104,72
Holland	145,442	159,177	155,07
Belgium	81,817	92,072	104,19
United States ...	44,798	46,370	44,11
Other countries	108,485	105,662	99,72
Totals	757,623	803,292	834,09

PRINTED.

April imports:—

	1902. Cwts.	1903. Cwts.	1904. Cwts.
Germany ...	2,833	2,516	2,05
Holland ...	1,491	3,123	2,74
Belgium	6,929	7,775	6,70
France	584	529	67
United States ...	2,114	2,065	1,53
Other countries	115	193	14
Totals	14,066	16,201	13,89

Digitized by Google

PRINTED.

April imports :—

	1902. £	1903. £	1904. £
Germany ...	7,385	7,017	7,243
Holland	6,985	8,102	11,761
Belgium... ...	17,824	22,941	17,723
France	3,069	2,749	3,993
United States ...	5,608	4,116	3,526
Other countries	645	750	536
Totals	41,516	45,675	44,782

January-April imports :—

	1902. Cwts.	1903. Cwts.	1904. Cwts.
Germany ...	11,221	11,166	10,939
Holland	6,169	8,139	8,769
Belgium... ...	23,896	30,502	29,138
France	2,694	2,447	3,565
United States ...	9,730	5,795	7,005
Other countries	735	844	812
Totals	54,445	58,893	60,228

	1902. £	1903. £	1904. £
Germany ...	29,146	29,697	32,862
Holland	22,677	30,192	39,425
Belgium... ...	64,560	89,030	71,545
France	13,976	12,579	16,027
United States ...	23,016	12,259	15,674
Other countries	2,148	2,683	2,826
Totals	155,523	176,440	178,359

STRAW, MILL, and WOOD PULP BOARDS.

April,	1904	233,976 cwts.	£80,864
,,	1903	236,700 ,,	83,330
,,	1902	257,636 ,,	92,867
Jan.-April,	1904	888,037 ,,	312,391
,,	1903	1,028,730 ,,	361,777
,,	1902	868,485 ,,	321,227

British Re-Exports of Foreign Paper.

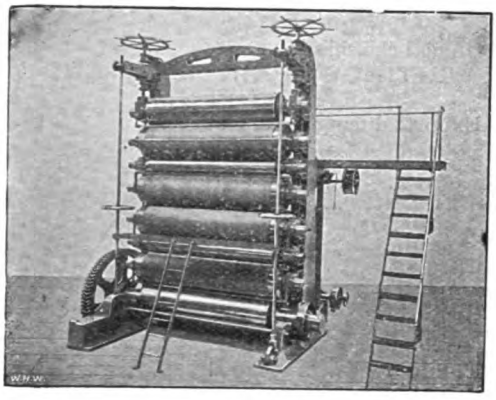
The total re-exports of paper, etc., during April and also January-April of this and of the two preceding years stand as under :—

April,	1904	13,177 cwts.	£10,720
,,	1903	21,210 ,,	15,041
,,	1902	9,455 ,,	8,559
Jan.-April,	1904	54,689 ,,	43,608
,,	1903	57,174 ,,	46,435
,,	1902	32,158 ,,	32,074

ACCORDING to a notice which appears in the *London Gazette* for the 10th inst., the Chytane China Clay Co. will, at the expiration of three months from that date, be struck off the register of Joint Stock Companies, and thereby dissolved, unless cause be shown to the contrary.

Do you want to sell or buy machinery, Advertise in the widely-read *World's Paper Trade Review.*

James Milne & Son, Ltd.
MILTON HOUSE WORKS,
EDINBURGH.
Papermakers' Engineers.



Telegrams:—"MILNE, Edinburgh."

"LION" LEATHER LACES
Unequalled Strength—"Always soft & seldom break."
Excels for Wide

and Double Belts.
Extra Strong. Most Durable. Very Light and Pliable.

A Real Gain "ECLIPSE" BELTING CREAM To All Users
Prevents slipping, greatly increases power, and makes Belting Ropes & Banding last nearly twice as long.
Sole Makers :
SUTCLIFFE BROS.,
Albert Works, Godley, near Manchester.

"TASCHEN-HILFSBUCH
unenibehrlicher
WOERTER DES PAPIERFACHS."
Technical Dictionary of Paper Trade Terms, in German and English, by E. A. HOPKINS.
OCTAVO, POST FREE 9d.
W. JOHNSTONHILL & Co., 58, Shoe Lane, London, E.C.

Digitized by Google

Exports of British Paper.

[illegible]

Hangings.

[illegible]	[illegible]	[illegible] cwts.	£21,56[illegible]
[illegible]	[illegible]	[illegible] ,,	[illegible]
[illegible]	[illegible]	[illegible] ,,	21,511
Jan. Apr. [illegible]	[illegible]	[illegible] ,,	91,64[illegible]
,, [illegible]	[illegible]	[illegible] ,,	[illegible]
,, 1902	[illegible]	[illegible] ,,	[illegible]

Bags.

April, 1904	1,980 cwts.		£1,98[illegible]
,, 1903	1,885 ,,		2,03[illegible]
,, 1902	3,250 ,,		2,701
Jan. Apr., 1904	9,073 ,,		9,241
,, 1903	10,525 ,,		10,137
,, 1902	9,457 ,,		8,46[illegible]

Other Descriptions.

Exports during April:—

	1902. Cwts.	1903. Cwts.	[illegible]
France ...	655	606	1,[illegible]
United States ...	629	911	7[illegible]
South Africa ...	4,271	4,266	3,[illegible]
East Indies ...	2,118	3,175	2,[illegible]
Australia ...	4,[illegible]	2,478	4,[illegible]
New Zealand ...	702	[illegible]55	[illegible]
Canada ...	[illegible]54	273	[illegible]
Other Countries	[illegible],811	4,094	5,[illegible]
Totals	18,575	16,158	19,2[illegible]

Writings, Printings and Envelopes

[illegible]

Digitized by Google

South Australia.

Tenders for Paper Wanted.

Tenders will be received at the Supply and Tender Board Office, Adelaide, South Australia, up till 3 p.m. on 26th July, 1904, for the supply and delivery at the Education Stores, Grote street, or such other place in Adelaide as may be directed by the Inspector-General of Schools, of paper, as under:—

200 reams super-calendered fine printing double crown, 30 in. by 20 in., weight 36 lbs.
200 reams cartridge, double crown, 30 in. by 20 in., weight 55 lbs.
150 reams cartridge imperial, 30 in. by 22 in., weight 60 lbs.
600 reams copybook paper, 33 in. by 20 in., weight 42 lbs.

Tenderers may quote for either of the above-mentioned items, and the Supply and Tender Board reserve the right to accept a portion or the whole of any tender.

The paper must be packed in cases in the flat, each ream being separately tied up, and be of the specified weight to the ream of 480 sheets, exclusive of string and wrapper; it must also be equal in all respects to the samples to be seen and obtained at the office of the Inspector-General of Schools, Adelaide, South Australia, where forms of tender and any information may also be obtained. Absolute exactness in size will be insisted on. There must be no variation. The whole of each description of the paper is to be manufactured in one lot, and delivery will be required in two shipments; the first shipment of one-half of the quantity of each item is to be delivered within eight months from the date of notice of acceptance of tender, and the second shipment of the remaining half within 10 months of such date, under a penalty in each case of 2½ per cent. per month, or part of a month, for delay beyond the specified dates.

The paper is to be subject to the approval of the Inspector-General of Schools, whose decision in cases of dispute is to be considered final.

Tenders should be endorsed "Tender for paper, Education Department." The successful tenderer will be required, within seven days of notice of acceptance, to make a deposit equal to 5 per cent. of the total value of the accepted tender as security for the due fulfilment of the contract. Neither the lowest nor any tender necessarily accepted.

PULP PIE PLATES.—The Keyes Fibre Co., of U.S.A., are placing on the market a new pulp pie plate. The company own patented machinery, and the process is such that the material is not handled from the placing of the logs in the grinder to the finished pie plates. The capacity of the plant is said to be 250,000 plates in twenty-four hours.

JAMES KENYON and SON,
DERBY STREET MILLS,
BURY, LANCASHIRE.
ALL FELTS for Papermakers.
Telegrams: "*KENYON, BURY.*"

WILLIAM MAKIN & SONS,
Attercliffe Steel Works, Sheffield, England.
(ESTABLISHED A.D. 1736).
PAPERMAKERS' STEEL and BRONZE TOOLS.
Illustrated Catalogues and Price Lists, in French and English, on Demand.

Remington Typewriter.
THE BUSINESS BUILDER.
(*Write for Particulars*).
100, GRACECHURCH STREET, LONDON, E.C.
253, OXFORD STREET, LONDON, W.

Digitized by Google

WORLD'S PAPER TRADE REVIEW.
Office: 58, Shoe Lane, E.C.

TRADE NOTES.

STAR PAPER MILL CO., LTD.—Dividends are announced of 3s. per share on the Preference, and 5s. per share on the Ordinary shares.

MILL END PAPER MILL, LTD.—At an extraordinary general meeting of this company, the following resolution was duly carried:—"That it has been proved to the satisfaction of this meeting that the company cannot, by reason of its liabilities, continue its business, and that it is advisable to wind up the same, and accordingly that the company be wound up voluntarily; and that Mr. Percy Ehrenfeldt, of Devonshire-chambers, 15, Bishopsgate-street Without, in the county of London, be and he is hereby appointed liquidator for the purpose of winding up the affairs of the company, at a remuneration of twenty-five guineas."

CASTNER-KELLNER ALKALI CO., LTD.—The net profit for the year ended March 31st last, after the usual liberal expenditure in keeping up the works, plant, and machinery to the highest state of efficiency throughout the year, is £42,020. To this has to be added the amount brought forward from last account, £13,151, making a total of £55,172. Deducting debenture interest, there is an available balance of £44,797. Out of this balance the directors recommend that £15,000 be appropriated to depreciation reserve, increasing that account to £70,000; that a dividend at the rate of 4 per cent. per annum be paid for the year ended March 31st, amounting to £18,000, leaving to be carried forward to next account a balance of £11,797.

FRENCH-HICKMAN FLAX FIBRE CO., LTD.—The report for the period ended December 31st last states with regard to the By-Products Paper Co., which acquired the American and Canadian patents and rights, that in February a cablegram was received advising that, while the business outlook of the company was very promising, its capital was exhausted. The chairman went to America immediately, and found that this unexpected and disappointing position was apparently entirely due to bad financial management. After lengthy negotiations, a reconstitution of the executive committee of the By-Products Paper Co. was effected. The American bondholders have agreed to pay the debts of the company, amounting to some £5,000 or £6,000. Mr. French's resignation as a director of the French-Hickman Co. was accepted by the board on February 3rd. The English patents and rights have been sold to Flax Pulp, Ltd., a company incorporated under the laws of Great Britain and Ireland, with their registered offices in London, with a capital of £125,000, of which £100,000 have been issued, £25,000 being held in reserve unissued. The chairman was appointed a director of Flax Pulp, Ltd., and has been elected chairman of their boa and they expect to start manufacture about six weeks. Meanwhile, for seve months past Flax Pulp Ltd., have b operating an experimental developm plant in a small mill acquired for t purpose.

THE death is announced of Mr. Jo Kershaw, of Darwen. He was forem papermaker at Hollins Mills, where he employed for forty years.

ARMSTRONG CARLISLE PLASTER CO., L —This company has been registered with nominal capital of £30,000, in £1 shar The business of Mr. T. J. Armstrong, a also the lease of certain mining rights o land at Colehill, near Carlisle, Cumberla known as Duncowfold, have been acquir The company will carry on the business miners, dealers, and manufacturers of g sum, mineral white, terra alba, etc., e The registered office is 81-84, Dashwo House, New Broad-street, E.C.

ESPARTO.—Mr. Clayton Beadle, F.C. whose portrait forms the frontispiece *Technics* (Geo. Newnes, Ltd.) for M contributes in the pages of the magaz mentioned some interesting particulars lating to esparto under the heading of "T Fibrous Constituents of Paper." There very little literature dealing with espar and the only monograph known to B Beadle is the very excellent treatise in t French language compiled by Monsieur Trabut, *Professeur a l'Ecole de Medicine*, Algiers. From this work illustrations are tak exemplifying the culture and structure of parto fibre. It is pointed out that there is or one esparto grass available for papermaki viz., *Stipa tenacissima*, the allied grass such as *Lygeum spartum* being used f making carpets, sandals, ropes, nets, e Mr. Beadle refers to the work of Mr. Thom Routledge in the introduction of esparto in this country for papermaking, and gives t composition, by analysis, of dried espar grass, and also particulars of esparto bo ings. The chemical treatment is describe and in speaking of the characteristics of t fibre, the author says it has not, being sho the power of giving great strength to t paper, but emphasises its soft, smooth suppl ness, not possessed by any other fibre. I introduction, says Mr. Beadle, has given pre-eminence in the illustrations of the be journals and periodicals, which other cou tries are not able to imitate except b means of thickly coated and highly-glaz art papers which are fatiguing to the ey Taking the case of Canada, in recent yea English paper has to a large extent be superseded by paper made in the Unit States; but British esparto papers still ho their own, as the Yankee so far has not be able to find a substitute. A valuable featu of the article is the inclusion of illustratio by photo-micrographs prepared by Mr. Jo Christie, F.R.M.S., who is a recognis authority on esparto, and who has ma a special study of the anatomy of the gra which for so many years has entered largely in the production of the highe

Digitized by Google

qualities of printing papers. One of the illustrations shows the fibrous constituents of the paper upon which *Technics* is printed, magnified 90 diameters.

"BAUXITE and its Chemical Uses" is the title of an interesting article, contributed by Mr. J. Cash, also appearing in *Technics*. The use of bauxite is not by any means confined to the production of aluminium, though it is, commercially, the chief source of that metal. The mineral substance—which Ireland, as well as France, furnishes in considerable quantity—is composed largely of the oxides of iron and aluminium; and besides being employed on a large scale by the British Aluminium Company in their important and growing industry, yields some titanium compounds which are being put to valuable use in this country for dyeing and other purposes. The manufacture of these compounds is carried out at the Manchester Aluminium Works of Messrs. Peter Spence and Sons, Ltd., the only establishment in existence where they are produced on a commercial scale.

A CONSULAR report states that the paper industry of Chemnitz (Germany), according to the census of 1902, gives employment to 1,220 hands. It is interesting to note that these include 341 males and 354 females over 21 years, 77 males and 258 females from 16 to 21 years, 61 males and 105 females from 14 to 16 years, and 23 males and one female under 14 years.

The Mexican Paper Combination.

Paper consumers in Mexico are afraid that the combination under the name of the San Rafael Paper Co.—including the San Rafael, Progreso, Pena Pobre and Belen Mills—will introduce arbitrary measures with the object of putting up prices. The company, however, state that, instead of closing down any of the mills and curtailing production, the policy will be to meet every demand upon it for stock of all kinds in the paper line, and the price, it is declared, will be, if anything, cheaper than at present.

The capital stock is 5,000,000 dols., in 50,000 shares of a par value of 100 dols. each, and the moving spirits in the combination are Messrs. Thomas Braniff and José Sanchez Ramos, who are also interested in financial and railroad enterprises.

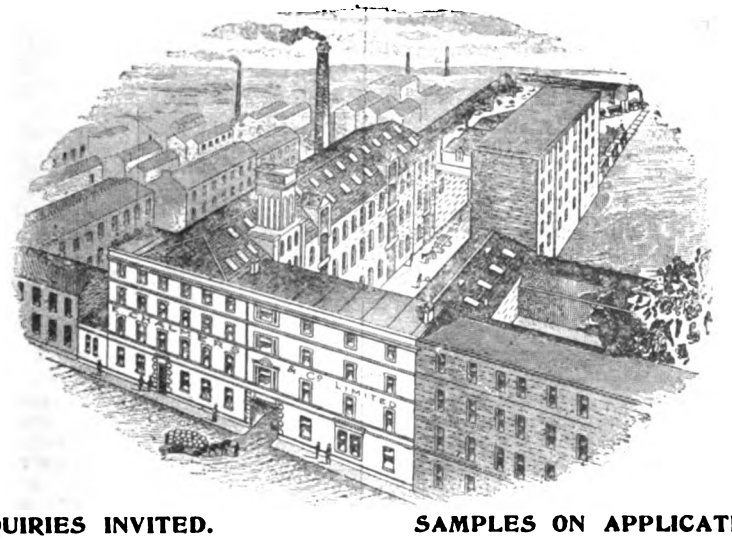
New machinery has been purchased in Germany by the company and, it is stated, in about two months the capacity and production will be doubled. A general overhauling of the machinery of the four mills is about to be made, and when this is completed, and the new machinery installed the management declares the production of paper of all grades will be sufficient to satisfy all needs. A considerable portion of the machinery of the Santa Teresa mill, also bought by the combination, will be transferred to the Progreso.

Telegrams: "GILES, LEITH." Telephone: No. 465.

E. CHALMERS & Co., LIMITED.

BONNINGTON, LEITH.

Linen Rags,
Cotton Rags,
Canvas,
Hemp Ropes,
Manilla Ropes,
Jute & Flax Bagging,



Woollen Rags, For Filter and Silurian Papers.
New Linen and Cotton Cuttings,
Waste Papers,
Paper Shavings
&c., &c.
All thoroughly well classed.

ENQUIRIES INVITED. SAMPLES ON APPLICATION.

N.B.—CASH OFFERS made for Disused Paper or other Works for Dismantling purposes.

Digitized by Google

THE Fiscal question, which so intimately affects the paper trade, has for a little time been rather under a cloud. The return of Mr. Chamberlain from Egypt has given it in some respects a fresh lease of life, but, it is fairly open to doubt whether "Fiscalitis" will ever again be the same power in the land that it was a few months ago. Still one never knows what may happen, and the intended celebration of the Cobden centenary in June next will probably stir matters up a bit further. In view of this celebration —one which I am inclined to think, very naturally and properly, should be a celebration for all it is worth—what a splendid opportunity there is for Free Traders and Protectionists to lay down the hatchet and consider their differences in a friendly and logical manner, without reference to party politics.

* * *

WHY on earth should a subject which concerns the very material existence of our Empire be made a mere matter of party warfare? There is, I hear, to be a big Cobden demonstration at the Alexandra Palace on June 4th, when Sir Henry Campbell-Bannerman will preside. Amongst other strenuous warriors in the fiscal field there are to be present Mr. Winston Churchill, M.P., Dr. Clifford, Mr. Will Crooks, M.P., and Mr. D. Lloyd George, M.P. This is excellent so far as it goes, but it seems a great pity that the occasion in question should not be made the starting point from which party differences might be buried, and rancorous political divergencies concerning a matter which, after all, is, or ought to be, essentially non-political, be merged in a common effort for the national weal.

* * *

MEANWHILE, as things are going at the moment, the stars in their courses seem rather to be running against the Protectionists than otherwise. Such at least is the complexion which the Board of Trade returns for April give to the trade situation. These returns really indicate about £1,000,000 worth better business than in April, 1903. The imports show an advance of about £1,400,000. It is evident, then, that, even if *our home* trade is a trifle dull at present, as *some* people find it to be, our foreign *customers are* placing increased orders with us.

* * *

DURING the month paper has done very well—*comparatively* speaking: we must always say "comparatively" in dealing with paper just now. We have exported £156,000 worth of paper as against £143,000 in 1903 and £149,000 in 1902. The increase is very encouraging so far as it goes, and I am told, and I believe, there is no reason under the sun why it should not keep on in the same encouraging groove. In the matter of materials for papermaking also, better business has been done, we having exported £38,000 worth of such materials as against £35,000 and £34,000 in 1902 and 1903 respectively.

* * *

AS regards the imports, I am afraid I am still in the old position of being unable to say much that is comforting. We imported £398,000 worth of foreign-made paper last month as compared with £393,000 and £378,000 in the same month of 1902 and 1903 respectively. That is not a good showing at all. We are still importing far too much foreign paper, a large proportion of which, anyhow, we are quite capable of making in this country ourselves.

* * *

THEN in the matter of papermaking materials, during last month we absorbed £212,000 in raw material, which is less than was the case in the corresponding month of 1902 and 1903, when the figures amounted to £242,000 and £270,000. It is always difficult to appraise the significance of those imports of raw material, and to know really where one is in the matter. At the same time it may be said that it is better for us to have our papermaking material imports increasing whilst our paper exports are also increasing, than to have them increase whilst our shipments of British-made paper are diminishing. So that, so far as that goes, we are fairly well situated at the moment.

* * *

NOVELS, like Blue books, are sometimes regarded as heavy reading, but, whether this is so or not, novels are heavy in the bulk, and especially when they fall on a man's head. I regret to learn that a workman in the employment of a well-known firm of London paper merchants was killed the other day by being struck on the head by a bundle of penny pocket novels. Their weight, it seems, was not very great, only being about 12 lbs., but they slipped from a stack and struck the unfortunate man on the head giving him a blow, from the effects of which he succumbed a few days later. This is by no means, however, the first case in which a man's life has been destroyed by fiction.

* * *

NOT a few paper trade men, especially of the younger generation, are more or less ardent playgoers. Just as in many cases their fathers were before them. In this connection a good story is told which is applicable to a paper trade playgoer as well as any other sort. There was a certain actress, whose charms and vivacity had long been proverbial. "Father," said a young

Digitized by Google

man with enthusiasm, "she is an angel, and I love her!" He was speaking of the lady whose name I have not given, and he added "Stop! not a word! I believe her to be an angel—I adore her—and I won't allow you to breathe a syllable against her." "Certainly not," said the father, "certainly not. Why, I adored her myself—when I was your age."

* * *

HERE is a good theatrical story which, I believe, has the merit—or is it the demerit?—of being true. The play was "Hamlet," and the First Grave Digger had fallen out with the Prince of Denmark, and meant to "queer" his adversary's business at night. All went smoothly until the First Grave Digger picked up the skull and said: "This skull has lain in the earth three-and-twenty years." "Whose was it?" quoth Hamlet. And then the Grave Digger uttered not a word, but stood scratching his head. Hamlet, thinking the other had "dried up," went on with—"Alas, poor Yorick!——" "You're quite right, sir," interpolated the comedian, "Yorick was the gentleman's name!"

* * *

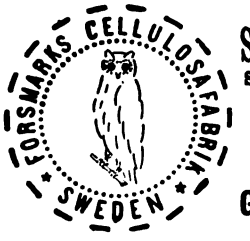
IN conclusion: It is not uncommon to hear of a wife supporting a husband, and sometimes beautiful actresses are the wives of the comic men who, while on the stage, disguise themselves in red noses. Once an elderly gentleman of a puritanical turn of mind, having a few minutes to wait at a railway station, killed the time by reading a theatrical poster. "Well I'm hanged if I wouldn't be ashamed of myself!" "Why, what's the matter Josuah?" said his wife. "Why here's an actor fellow going round the country advertising that he is 'supported by a charming young actress.' Why in thunder doesn't he go and work himself?" But, after all he is not the only one who is supported; and when I come to think of it I have supported myself, not to speak of a wife and family, by the point of my pen for a good many years, and even Cinquevalli, with all his cleverness, can't do a smarter thing than that! Fact.

G. A. F.

Forsmarks Cellulosafabrik

FORSMARK, SWEDEN.

TRADE MARK.



Unbleached SULPHATE PULPS

Strong & Easily Bleached.

THV. OLROG, STOCKHOLM.

Apply to—

GEORG v.d. BUSCHE, HAMBURG.

Or Messrs. BECKER & CO., 64 Cannon Street LONDON, E.C.

FOR SALE.

1 RUBBER COVERED ROLL, 17⅞-in. by 94½-in. long on face.
1 SET of BRASS PRESS ROLLS, 12-in. and 16-in. by 70½-in., with Standards, Felt Roll Brackets, etc.
1 DRYING CYLINDER, 42-in. diameter by 70½-in., with Framing, Felt Rolls, etc.
4 DRYING CYLINDERS, 36-in. diameter by 70½-in., with Framing, Felt Rolls, etc.
1 CAST IRON COOLING CYLINDER, 48-in. by 70-in. with Brackets, etc.
4 PERFORATED CAST IRON ROLLS, 13-in. by 92-in.

Apply to BERTRAMS LIMITED, (3)
St. Katherine's Works, Sciennes, EDINBURGH.

PATENTS, INVENTIONS, &c.

READERS of this Paper who have an **Idea** for a **Patent**, or desire **information** or **Advice** in connection with Inventions, &c., should communicate with the Patent Editor, who will supply full particulars direct by letter, free of charge.

Address: *The World's Paper Trade Review*, 58, SHOE LANE, LONDON, E.C., and write on the left hand corner of the envelope the word "Patents."

Telegraphic Address: "APSLEY, LIVERPOOL." Telephone: 382.

MAKIN & BANCROFT, Codes { ABC, 4th Edition, Liebers, Private.

Apsley Buildings, 4, Old Hall Street, Liverpool.

SOLE BRITISH AGENTS FOR THE **SAULT STE. MARIE PULP & PAPER Co.,**

ONTARIO, CANADA.

Direct Importers of All Papermakers' Materials.

Now Ready. 44th Edition. Price 2/6 net, Post Free.

THE PAPER MILLS DIRECTORY for 1904,

Containing a List of the Paper Mills in the United Kingdom, with Full Particulars of their Manufacture, and much useful Information in connection with the Paper Trade indispensable to all connected therewith.

London: SIMPKIN MARSHALL & Co., Limited, Paternoster Row: and all Booksellers

Also for remittance of Stamps or Postal Order of the Editor, 27, Pilgrim Street, Ludgate Hill, London, E.C.

Digitized by Google

GERMANY.

NORMAL PAPERS.—The annual report has recently been published of the work of the Technical Testing Offices, in Berlin. It appears that 722 papers were tested by order of public authorities, and of this number 79·2 per cent. proved to be exactly as required; 14·1 per cent. better than required and 12·7 per cent. inferior to the quality demanded. The irregularities showed insufficient tearing length and also a want of elasticity, but the principal fault seemed to be insufficient resistance to crumpling. The tests showed in some cases too much ash contents, whilst some showed the use of auxiliary fibres in classes where such were not allowed. There were 49 tests for private firms of normal papers, and in four instances the paper was shown to be better than required, and in 39 cases they were according to requirements, and in 11 cases inferior.

SWITZERLAND.

A NEW MACHINE is being put in the Landquart Mills in Landquart. It will run on medium and fine papers.

UNITED STATES.

A PLAN of reorganisation of the White Mountain Paper Co., of Portsmouth, N.H., covers the formation of a new company to be capitalised for 5,000,000 dols. in 6 per cent. non-cumulative stock preferred as to dividends and assets, and 3,000,000 common stock. The first step proposed is to foreclose the mortgage on the property and to operate the paper mill, whilst the wood preparing and pulp producing plants will be worked by a subsidiary company.

MR. F. M. PEET has succeeded Mr. R. B. McEwan as president of the National News Board Company.

A PULP SPOOL.—Mr. William L. Williams, of Williamantic, New Haven, Conn., is said to have invented a pulp spool to take the place of the large wooden thread spools.

ALL sulphite manillas will form the product of the new mill of the De Grasse Paper Co. at Pyrites, St. Lawrence Co., N.Y.

TARIFF DECISIONS.—The following decisions have been rendered by the United States Board of General Appraisers:—Surface coated paper, from Brepols and Dierckzoon, Antwerp, exported February 1sth, 1904; entered at Philadelphia (file No. 8,331 O. P.). Findings of Sharretts, G. A.: Five hundred sheets green glazed, 20 by 26, 26 in., and green, blue, gray and red ditto, 24 in.,

[illegible] entered at [illegible] per ream [illegible] duties [illegible] and invoice charges. No advance.—Paper imported from Vienna and [illegible] entered January 20th, 1904, entered through the N. Y. [illegible] Findings: Paper is a "Two hundred thousand sheets white laid printing square 18 by 24 inches [illegible] per ream [illegible] duties [illegible] and charges and packing.

ARGENTINE.

THE [illegible] News Mak[illegible] has been [illegible] successful [illegible] mills in supply[illegible] the [illegible] difficulty of transport in the [illegible] Paper is chiefly [illegible] [illegible] overseas, Italy, France and the United States, the new [illegible] Bunge [illegible] Argentine imports [illegible] 1903 to the value of [illegible],385 dols. [illegible] compared with the previous year.

Canada Notes.

THE [illegible] MANUFACTURING AN[illegible] has been formed with [illegible] dols., with the [illegible] the lumber and pulp [illegible] the Gaspe Peninsula, of Quebec. The [illegible] are Messrs. Angus and [illegible]; F. J. H. Eckardt [illegible]; Edwards and John A. [illegible]; and Gordon C. Edwards, of Ottawa.

THE ST. RAYMOND PAPER CO. has been incorporated with head quarters in Montreal to [illegible] lumber, pulp, paper, etc. [illegible] dols. The incorporators are Messrs. J. [illegible] McLaw, W. J. Buchanan, John A. [illegible], J. P. Enwright, and R. W. Murison. The new company will take over the assets of the St. Raymond Co., having water powers and pulp mills at St. Raymond Station.

GAZETTE.

DISTRIBUTION OF ASSETS.

[illegible] 16, Basinghall-street, London. [illegible] Claims by June 24th to Phelps and [illegible], 35, Basinghall-street, E.C., solicitors for the [illegible].

THE BANKRUPTCY ACTS, 1883 AND 1890.

ADJUDICATION.

[illegible] & HOLMES, 15a, Whitecross-street, [illegible] E.C., box makers. Date of order, May 5th.

THE COMPANIES ACTS, 1862 to 1900.

NOTICE OF RELEASE OF LIQUIDATOR.

THE [illegible] TIMES, Ltd., 43 and 43a, Fetter-lane, E.C., [illegible]. G. S. Barnes, senior, official receiver, 33, Carey-street, Lincoln's-inn, W.C. Released April 2-th.

Digitized by Google

SPECIAL PREPAID ADVERTISEMENTS

IT IS IMPORTANT that Advertisements under any of the Headings mentioned below should reach us by the first post on Thursday to insure insertion the following day.

SITUATIONS WANTED—Charges for advertisements under this heading are One Shilling for twenty-four words, and One Penny per word after. Minimum charge One Shilling. Three Insertions are given for the price of two. Cash to be sent with Order.

SITUATIONS VACANT, BUSINESSES WANTED or FOR DISPOSAL, MILLS WANTED or TO LET, MACHINERY, and MISCELLANEOUS—Charges for Advertisements of the above class are Three Shillings for fifty words or under; One Shilling extra for every line or portion after. Ten words to be reckoned for each line

LEGAL & FINANCIAL ANNOUNCEMENTS, TENDERS, SALES BY AUCTION, &c—One Shilling per line.

ADVERTISERS, by paying an extra fee of Sixpence, can have the replies addressed to the WORLD'S PAPER TRADE REVIEW Office under a number, and such replies will then be forwarded post free.

PAYMENTS must be made in advance, except where the advertiser has a running account, in which case the cost, can be debited thereto.

CHEQUES and Post Office Orders to be Crossed and made payable to W. JOHN STONHILL & CO.

OFFICES—58, SHOE LANE, LONDON, E.C

Situations Vacant.

NIGHT FOREMAN Wanted for Mill making News and Printings; must be well up in Colours.—State wages required, age, and experience, to No. 9,451, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9451

PAPER-COATING PLANT.—Wanted, a thoroughly competent Foreman for the production of High-class Chromo and Art Papers. Only first-class men need apply.—Applications, stating experience, salary expected, etc., to A. M. Peebles and Son, Ltd., Rishton Paper Mills, Rishton, Lancashire. 9445

REPRESENTATIVE, well introduced to the Home and Export Straw Paper Trade, Wanted.—Address, "J.C., 7,020," care of Rudolf Mosse, Berlin, S.W. 9447

WANTED, smart Young Man as Cutterman; able to run Reeler as required. State references, wages, etc.—Address, No. 9,444, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9444

Situations Wanted.

BLOTTINGS.—A Gentleman, with ten years' practical experience in a Blotting Mill, requires employment; can initiate and superintend the manufacture from start to finish; buying and selling.—Address, No. 9,437, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9437

CLERK, German (23), some knowledge of the Paper Business, requires Situation; highest references. The first few months without remuneration.—Address, No. 9,433, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9433

FINISHER, age 24, seeks Situation; used to S.C. Printings, Browns, Blottings, etc.; capable of taking charge; good references.—Write, stating wages, H. Dyer, 3, Anglo-cottages, Purfleet, Essex. 9436

HEAD FINISHER open for engagement; thoroughly experienced in E.S. Writings, Fine Printings, Art, Chromo, Tinted Surface, and Gum Papers.—Address, No. 9,448, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9448

PRACTICAL FOREMAN seeks Situation; experienced in Ropes, Shops, all classes of Browns; at present in small Mill.—Address, No. 9,416, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9416

TO PAPERMAKERS. — Practical Machineman, with family of workers, seeks Situation as Working Foreman, Night Foreman, or Machineman; Browns, Shops, Caps, Casings; abstainer; reliable.—Joseph Allen, opposite Church, Ecclesfield, Sheffield. 9435

YOUNG MAN seeks a place as Dryer, Cutter, or Reelerman; reference given.—Apply, Edgar Ellis, Bisham, near Great Marlow, Bucks. 9442

Machinery.

FOR SALE, Several Second-hand Dandy Rolls, equal to New.—For full particulars and sizes, write to T. J. MARSHALL & Co., Campbell Works, Stoke Newington, London, N.

Also Several Second-hand Red Rubber Deckle Straps.

If you WANT A DANDY ROLL QUICKLY, Telegraph "DANDYROLLS, LONDON."

Telephone Number: 79 "Dalston." 6288

FOR SALE, three right and three left-hand Breaking Engines of 9 cwt. capacity, fitted with Drum Washers. Also two left-hand Breaking Engines of 5 cwts. capacity, fitted with Drum Washers. Everything complete and in good working order. One Kollergang; the stones are 6-ft. by 1-ft. 6-in., and in first-class order. The above can be seen by appointment.—Address, No. 9,450, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9450

FOR SALE, Two Lancashire Steam Boilers, 28-ft. by 6-ft. 6-in.; last working at 100-lbs. pressure; price £150 each. Two Papermakers' Bleach Tanks, complete, 6 ft. square, including one pump, and gearing for same. Two Tanks, 18-ft. by 9-ft. by 3-ft., flat ends.—For further particulars, address, No. 9,452, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9452

WANTED, large Washing Engine and Nuttall Chopper, in good condition.—Address, No. 9,432, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, E.C. 9432

WANTED, Second-hand Angle Cutter, to cut up to 72-in. wide.—Address, Cannon and Clapperton, Ltd., Paper Works, Sandford-on-Thames, Oxford. 9446

Miscellaneous.

JOHN FULTON & CO., Engravers of Rollers for Printing Wall Papers, etc., also of Rollers for Embossing all kinds of Paper.—Knowsley Street Engraving Works, Manchester.

MILLS FOR SALE.—By private treaty as a current going concern, Freehold and Leasehold Mills, with good water and steam power. The capacity of these Mills together is 30 tons per week, and will be sold at a low price, offering a favourable opportunity for a moderate amount of capital.—For full particulars, address No. 9,440, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9440

OLD-ESTABLISHED FIRM of Manufacturers, wishing to secure additional output with respectable firms of Bookbinders, desire to Correspond with a Gentleman calling on same. Satisfactory arrangements will be made for the introduction of responsible business.—Address, "Glue," c/o J. and H. Bell, Ltd., Carlton-street, Nottingham. 9148

Digitized by Google

ATTENTION

is respectfully invited from all Manufacturers to our

NEW SYSTEM OF

LUBRICATING BEARINGS.

Those contemplating a change in their Bearings or Building New Works, should CONSULT US before deciding, as we have the

MOST UP-TO-DATE SYSTEM IN EXISTENCE.

The numerous attempted imitations prove its Excellence.

Address:—

DIAMOND LUBRICATING Co., LTD.,
94, Market Street,
Telephone 4886. MANCHESTER.

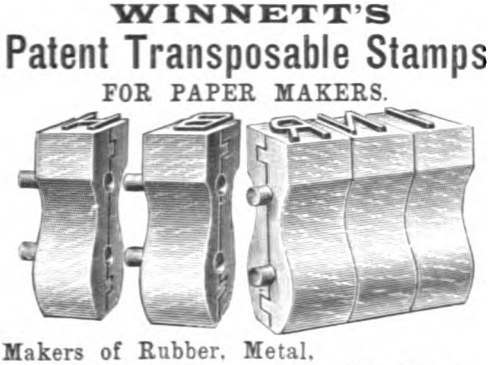
WILLIAM REGISTERED **VARCOE AND SONS,**

STOKE-ON-TRENT,

CHINA CLAYS

For PAPER-MAKERS.

WINNETT'S
Patent Transposable Stamps
FOR PAPER MAKERS.



Makers of Rubber, Metal, Wood, and Flexible Stamps.

WINNETT'S NATIONAL STAMP CO.,
125, London Road & Sugar Lane, Manchester.

The World's Paper Trade Review
A WEEKLY JOURNAL
PAPER MAKERS & ENGINEERS.

ESTABLISHED 1879.
No. 1221 OLD SERIES
No. 1166 NEW WEEKLY SERIES

THE LEADING JOURNAL
For the British Paper & Pulp Industries

Printed and Published EVERY FRIDA
by W. JOHN STONHILL & CO.,
at 58, Shoe Lane, London, E.C

Subscription: £1 per Annum, post fr
to any part of the world.

REPRESENTATIVE FOR THE LANCASHIRE, YORKSHIRE, AND MIDLAND DISTRICTS:
MR. THOMAS FOSTER,
4, BOWKER STREET,
HIGHER BROUGHTON, MANCHESTE

FRIDAY, MAY 13, 1904.

PRINCIPAL CONTENTS.

	PAG
Blotting Papers—Physical Tests for Comparing Commercial Values	1
The Paper Trade in Roumania	4
Darwen Paper Mill Co., and River Pollution	6
British Papermakers in the United States	6
Northfleet Paper Mills, Ltd.	7
Month's Imports of Foreign Paper	10
Month's Exports of British Paper	12
Tenders for Paper Wanted	13
Trade Notes	14
The Mexican Paper Combination	15
Commentarium	16
Our Foreign Post	18
Canadian Notes	18
Gazette	18
Leaderettes	20
Stocks and Shares	22
Market Reports	24
Wood Pulp Industry	27
British Imports of Chemical and Mechanical Wood Pulp	28
Imports of Papermaking Materials	30
American Imports of Paper, Paper Stock, Chemicals, Etc.	33
Commercial Intelligence	36
New "Limiteds"	37
Liens Registered	38
Abridged Patent Specifications	40

FOR LIST OF ADVERTISERS
See Page 23.

The American "Paper Trust."

AN investigation is to be made as to whether the charges preferred by newspaper publishers against the International Paper Co., of New York, can be sustained. It is alleged that a "Paper Trust" exists in restraint of trade, and that manufacturers

Digitized by Google

are committing a violation against the Sherman anti-trust law. The Department of Justice, according to Attorney-General Knox, stands ready to investigate alleged cases of violation of the trust laws whenever evidence is presented in due form by trustworthy persons. The publishers' case is to the effect that the paper manufacturers have an agreement by which they divide territory among themselves, that they fix prices at an unreasonable and burdensome figure, and that their business is managed in violation of the law regulating commerce between the States. The Attorney-General explained to a delegation of the newspaper publishers the distinction between what could and what could not be accomplished under the Sherman Act, and particularly the distinction the courts have drawn between combinations affecting production and combinations affecting interstate commerce directly. If the charges could be sustained he would institute appropriate proceedings to stop the nefarious practices of the alleged combination.

* * *

British Imports and Exports of Paper.

THE foreign papermaker found a good market in this country last month for his product, the total value of the supplies being £398,304, or £19,778 better than in April of last year. The month's exports of British paper were of the value of £156,270, a comparative increase of £13,072. During the four months (January-April) the imports amounted to £1,616,516 and the exports to £625,851, increases of £16,475 and £45,982 respectively compared with the corresponding period of last year. The increase in British shipments is by no means unsatisfactory, although the fact cannot be ignored that imports show an excess of £990,665 over exports.

* * *

Foreign Paper.

THE four months' imports comprised £1,125,766 worth of unprinted paper—on reels, £291,668; not on reels, £834,098—£178,359 worth of printed paper, and £312,391 worth of boards. Compared with the corresponding period of last year, an increase is shown in the imports of unprinted paper to the amount of £66,942—on reels £36,136, and not on reels £30,806—in printed paper an advance of £1,919, and in boards a decrease of £52,386. The reason of the small increase in the total value of imports compared with the corresponding four months of last year is, therefore, solely owing to the decline in the demand for straw, mill, and wood pulp boards. In the supply of reel paper to the British market the trade is monopolised by Norway and Sweden; of the total value for the first four months of the present year the receipts from the two countries mentioned amount to over 64 per cent. The next country of importance sending reel paper is the United States, participating to the extent of over 14 per cent., whilst the value of the shipments from Germany, Holland and Belgium amounts to about 16 per cent. In the supply of unprinted not on reels, Norway and Sweden also take the lead, the receipts at British ports during January-April amounting to nearly 40 per cent. of the total, whilst Germany, Holland and Belgium (together) were responsible for 43½ per cent., and the United States over 5 per cent. Scandinavian competition in the British market is, apparently, highly successful; in the supply of unprinted paper alone during January-April (compared with the corresponding four months of last year) the value of the shipments from Norway shows an increase of £37,349, and from Sweden an addition of £36,959, whereas Germany, Holland and Belgium between them only increased their trade by £8,373, whilst the shipments of unprinted from the United States show a decrease of £11,083.

* * *

British Paper.

ALL classes of British paper exported, with the exception of bags, show an increase in value during January-April compared with the corresponding period of last year. Writings, printings and envelopes were shipped to the amount of £399,767, an advance of £14,073; hangings, £91,644, an addition of £7,678; bags, £9,241, a decrease of £896; and other descriptions, £125,199, an increase of £25,127. Of the total value of writings, printings, and envelopes, the shipments to Australia during January-April represented 21·7 per cent.; to B. E. Indies, 17 per cent.; South Africa, 13·5 per cent.; New Zealand, 8·6 per cent.; France, 7·6 per cent.; Canada, 4 per cent.; and the United States, 2·3 per cent. It is encouraging to find, compared with the corresponding four months of last year, that the Australian demand for British writings, printings, and envelopes, shows an increase in value to the amount of £14,149. Exports to B. E. Indies mark an advance of £13,649; to New Zealand, £4,352; and to Canada, £4,018. Unfortunately, shipments of writings, printings, and envelopes to South Africa have fallen off considerably, the depreciation in value amounting to £23,253, and to France and the United States los-

Digitized by Google

are shown of £22,053 and £1,382 respectively. In other kinds of paper (not including hangings and bags) the shipments to South Africa show a reduction in value of £4,851 during January-April (compared with a year ago), whilst other markets, particularly Australia and the East Indies, all show substantial increases.

* * *

Canada's Imports of Paper.

During the seven months ended January last Canada imported paper and articles of paper to the value of £265,495. Of this total the supplies from the United States amounted to over 78 per cent., whilst the receipts from Great Britain were a little over 20 per cent. Compared with the corresponding period of the previous year, the shipments from the United States show an increase of £28,753, and from the United Kingdom to the amount of £6,422. Canada's preference being strongly in favour of the United States. The total value of the seven months' imports into Canada shows an advance of £38,700 compared with the corresponding period of the previous year.

Stocks and Shares.

The following report is supplied by Mr. F. D. Dean, stock and share broker, 36, Corporation-street, Manchester. Telegrams: "Freelean, Manchester;" 'Phone, No. 2380).

Beyond a few dividend announcements, the past week has been devoid of any special interest, and the Paper Market may be said to be "as you were." A little quiet demand for Bury has improved both ordinary and prefs.; the former at 7½ and the latter at 7⅝ being both up a ⅛. Kellner-Partington are paying the usual 15 per cent. dividend, but this has not had any effect on prices. Olive and Partington pref. were marked lower at one time, being ⅛ buyers, but they have since recovered and only show a fractional decline of ⅛ at 5⅛. Enquiry for A. M. Peebles ordinary has lifted them ¼ to ⅜ middle, but the pref. are unmoved at 4⅛. Star announce 10 per cent. dividend again on the ordinary, which compares with the same distribution for last May, payable 20th inst.; the price is, however, unaltered at ⅞ ex dividend; the Debenture Stock is quoted ex the usual half-yearly dividend.

Amongst the Chemical securities, business has been decidedly less, and the activity of recent weeks has quite died out. Brunner Mond old ordinary are down ¼ at 5⅛. But the new are steady at 2⅛ buyers. Cassel's-Kellners are unchanged on the dividend announcement of 4 per cent. for the year, which was about what was expected. Nobel Union issues have been rather easier, but have recovered some of the fall, and the ordinary are only down 3d. at £5 9d., and the preference ⅛ as sound 4. United Alkali descriptions have been rather quiet, with no alteration in the price of the ordinary, though the pref. are up ⅛ at 7½ and the Debenture Stock ¼ at 98.

PAPER, &c.

Amount Paid.	Nominal Amount.	Name of Company.	Dividend last half-year.	Prices May 11.
£	£	Annandale & Son ord.	m	2⅜—5⅝
5	5	do. do. pref.	5	5⅛—5⅜
100	100	Bergvik Co., 4½% deb. Nom. £—,000	4½	95—100
m	m	do. do. deferred	6	17—19
m	m	do. do. 6% cum. pref.	6	10—12½
5	5	Burnley Paper Co.	m	7—7⅜
7	7	Bury Paper, ord.	nil	7—7⅛
7	7	do. 6% pref.	nil	7—7⅛
5	5	Darwen Paper Mill Co. "A"	m	11—11½
5	5	do. do. "B"	m	7—8
1	1	do. "C" issued at 5%...	m	2—2⅜
10	m	E. Lancashire Paper Co.	m	14½—15
10	m	do. do. 6% pref.	m	14½—15
5	5	do. do. issue	5	4½—4⅝
3	5	Kellner-Partington Co.	15	9½—9⅝ xd.
5	5	do. do.	15	16 5/8—16¾
100	100	do. do. 4½% deb. (red. 1930)	4½	100—103
5	5	M. Ireland Paper Co.	m	6½—7⅛
5	5	Olive & Partington 5% pref.	5	5—5⅛
7	m	Olive Brothers	nil	5⅛—5⅜
10	m	do. do. fully paid	nil	9⅝—9⅞
5	3	do. do. pref.	m	4—4⅛
1	1	Owen, T. & Co. 6% pref.	6	170—180
100	100	do. do. deb.	5	94—95
5	5	Peebles, A. M., & Son	4	3⅜—3⅝
5	5	do. 5% cum. pref.	5	4⅝—4⅞
100	Stock	do. 4½% deb.	4½	98—100
3	5	Ramsbottom Paper Co.	m	2½—3⅛
1	1	do. do. cum. pref.	5	22/6—23/6
40	5	Roach Bridge Paper Co.	m	3⅝—4⅛
5	5	Star Paper Co.	m	8½—8⅝ xd.
3	5	do. do. cum. pref.	m	6½—6⅝ xd.
100	100	do. do. deb. stock	4½	97—99½ xd.
10	10	Spicer Brothers cum. pref.	5	9⅝—10
10	10	Waterlow & Sons cum. cum. int.	10½	16½—18½
10	10	do. do. non.-cum. pref.	4	12½—12⅝
10	10	do. do. cum. pref.	10	8—8⅝

CHEMICALS, &c.

1	1	Brunner, Mond & Co.	m	5—5⅛
10/	1	do. do. "New"	m	2—2⅛
10	10	do. do. 7% cum. pref.	7	17½—17⅝
1	1	Cassner-Kellner Alkali Co.	m½	1 3/8—1 7/16
100	Stock	do. do. 4½% deb.	4½	94—95
5	5	do. do. cum. pref.	m½	4—4⅛
1	1	Electrolytic Alkali Co.	nil	5 0—5 6
1	1	do. do. pref.	nil	12/6—13/6
5	5	Langnam Chemical Co.	m	3⅝—3¾
5	10	Lawes Chemical Co.	4½	3⅜—3⅝
10	10	do. do. pref.	7	8½—8⅝
4	4	Nobel Union Ord.	nil	7/6—7/9
5	5	do. 7% cum. pref.	7	7—7⅛
100	Stock	do. 1st Mort. deb.	4½	95—96
100	"	do. "B" Mort. deb.	4½	93—94
5	10	Steiner (F. & Co. Ord.	nil	6—7
10	10	do. do. cum. pref.	5	7—8
30	Stock	do. do. deb. stock (red. 1925)	4	104—105
10	10	United Alkali Co.	m	3 5/8—3 3/4
9	10	do. do. cum. pref.	7	7—7⅛
100	Stock	do. mort. deb. (red. 4th 1926)	5	97—98½
1	1	United Indigo & Chemical	nil	1 0—1 1/8
1	1	do. do. 6% cum. pref.	6	5½—5⅝

* Interim. † For year. ‡ Div. in B.U.C.E.

Digitized by Google

LIST OF ADVERTISERS.

Where number of page is omitted the advertisement does not appear in this issue.

Alkali, Etc. PAGE
Brunner, Mond & Co., Ltd. ... ...
United Alkali Co., Ltd. ... ...

Analysts, Experts, Engineers, &c.
Ekman, C. D. 25
Hurst, George H. 32
Sindall, R. W. 25
Stevens, Dr. Hy. P. 25

Belting, etc.
Sutcliffe Bros. 11

Boiler Coverings and Composition.
Emmett, James, Ltd. 25
Sutcliffe Bros. ... ...

Chemicals.
Bramwell, E., & Son ... ...
Brunner, Mond & Co., Ltd. ... ...
Pochin, H. D., & Co., Ltd. ... ...
Spence, Peter & Sons, Ltd. ... ...
United Alkali Co., Ltd. ... ...

Colours.
Cardwell, J. L., & Co. 32
Cornbrook Chemical Co. 25
Hinshelwood, Thos., & Co. 32
Levinstein, Ltd. 32
Manchester Aniline Co. 32
Pochin, H. D., & Co., Ltd. ... ...
Via Gellia Colour Co. 32

Dandy Rolls.
Green, W., & Son ... ...
Marshall, T. J., & Co. 19

Economisers (Fuel).
Green, E., & Son, Ltd. ... ...

Engines (Steam).
Milne, James, & Son, Ltd, ...

Esparto Pulp.
Grondal, A. L. ... ...

Felts and Jackets (Papermakers').
Huyck, F. C., & Sons ... ...
Kenyon, James, & Son 13
Porritt, Joseph, & Son ... ...
Whitehead, R. R., & Bros., Ltd. ... ...

Mill Refuse, Treatment of.
Liquid Destructors, Ltd. ... ...

Minerals, Etc.
Belvoir and Newark Plaster Co. 32
Best, James, and Sons 32
Birch, W. Singleton, & Son, Ltd. 32
Bodelva and Lantern China Clay Works 32
Cafferata & Co. 32
China Clay Co. 32
Howe, John, & Co. 32
Lassale, Th. 32
Pochin, H. D., & Co., Ltd. ... ...
Rogers, J., & Co. 32
Satinite Co. ... ...
Varcoe & Sons 20
Winser & Co. 32

Miscellaneous.
Directory 32
Machinery for Sale and Wanted 19
Paper Mill Directory 17
Situations Vacant and Wanted 19

Oils and Lubricants.
Diamond Oil Co., Ltd. 20
Sutcliffe Bros. ... ...

Paper and Pulp Making Machinery.
Bentley & Jackson, Ltd. 8–9
Bertram, James, & Son, Ltd. ... ... *Cover iii.*
Bertrams Ltd. 17
Dietrich, Robert ... ...
Füllner, H. ... ...

Paper & Pulpmaking Machinery—*(Continued)*
PAGE
Lechla, O. ... ...
Marx, J., & Co. ... ...
Masson, Scott & Co., Ltd. ... ...
Milne, James, & Son, Ltd. 11
Voith, J. M. 5
Walmsley, Chas., & Co., Ltd. ... ...
Wandel, Chr. ... ...
West End Engine Works ... ...
Wurster, Dr. C. 29

Paper Bag Machinery.
Bumsted & Chandler ... ...

Paper Stock.
Beaumont, J., & Co. 25
Bradford, John S., & Co. ... ...
Caldwell, J., & Sons 25
Chalmers, E., & Co., Ltd. 15
Freese, Jean 25
Hay, R. H., & Co. ... ... *Cover i.*
Hyman Bros. ... ...

Rag Pulps, &c.
Courtelary Wood Pulp Works Co. 29

Roll and Plate Engravers, etc.
Fulton, John, & Co. 19

Rubber Stamps, &c.
Winnett's National Stamp Co. 20

Sizing.
Grove Chemical Co., Ltd. 32

Strawboard Centres.
Boyd, Hart & Co. 32

Straw Pulp.
Grondal, A. L. ... ...
Vereinigte Strohstoff-Fabriken ... ...

Tools (Papermakers').
Makin, William, & Sons 13

Typewriters.
Remington Typewriter 13

Ventilators, Etc.
Sutcliff Ventilating and Drying Co. 32

Water Supplies.
Abundant Water Supply Co. 32
Isler, C., & Co. 32
Le Grand & Sutcliff 25

Wood Pulp.
Actiengesellschaft für Maschinenpapier-Fabrikation ... 29
Alsing & Co., Ltd. 32
Andrews & Co., Ltd. ... ... *Cover i.*
Berner & Nielson ... ...
Forsmarks Cellulose Fabrik 17
Grant, W., & Co. 32
Grondal, A. L. ... ...
Hay, R. H., & Co. ... ... *Cover i.*
Henderson, Craig & Co., Ltd. ... ...
Johnsen, Jorgensen and Wettre ... ...
Kommanditbolaget C. Fr. Waern & Co. 25
Lovenskiold-Fossum 5
Makin & Bancroft 17
Munds, Wilh. 25
Olrog, Thv. ... ...
Skotselv Cellulosefabrik ... ...
Storviks Sulfit Aktiebolag ... ...
Taylor, F. D., & Co. 5
Taylor, W. G., & Co., Ltd. ... ...
Tilsit Zellstoff Fabrik ... ...
Wertheim, A., & Co. ... ... *Cover iv.*
Wood, Harry B. 29

METALS.—Under the date of Wednesday last, Messrs. I. and J. Hyman, metal merchants, Britannia-street, Kings-cross, quote (subject to market fluctuations) their prices for Old Scrap Metals:—

	Per Ton.
Clean Copper	£52 0 0
Tinned or Brassery Copper	49 0 0
Gun Metal	47 0 0
Brass	37 10 0
Old Zinc	18 0 0
New Zinc Cuttings	19 15 0
Lead (subject to usual 4-lbs. per cwt. tare)	10 15 0
Hollow Pewter	92 0 0

Digitized by Google

MARKET REPORTS.

Telegrams—"STONHILL, LONDON."

Chemicals.

Market firmer. AMMONIA ALKALI, 58 per cent., is quoted £4 10s. to £4 15s.; CAUSTIC SODA, 70 per cent., £10, 10s. to £10 15s.; BLEACHING POWDER, soft wood, £4 5s. to £5 10s.; SODA CRYSTALS, £2 17s. 6d. to £3 2s. 6d.; and RAW SULPHUR £5 5s. to £5 10s.

SODA COMPOUNDS were exported during April last to the extent of 577,052 cwts. of the value of £1 [illegible] and during April, 1903, to the amount of 461,967 cwts. of the value of £295,657. During January-April the exports reached a total of 1,455,888 cwts., as against 1,470,166 cwts. during the corresponding period of the previous year, the respective values being £881,442 and £920,040.

The exports of BLEACHING MATERIALS during April of this year were 72,722 cwts. valued at £14,425 and last year 80,763 cwts. of the value of £17,041. For the first four months of the present year Jan.-April the exports amounted to 272,461 cwts. of the value of £52,770, as against 302,714 cwts. and £57,808 for the Jan.-April, 1903.

FOREIGN SODA COMPOUNDS were imported during April last to the extent of 27,380 cwts. as against 20,504 cwts. for April last year, the respective values being £2,783 and £1,856. During Jan.-April 86,993 cwts. were imported valued at £8,765, compared with 98,439 cwts. valued at £10,158 for the corresponding period of last year.

FOREIGN BLEACHING MATERIALS were received at British ports during April to the extent of 17,800 cwts. of the value of £3,000, an increase compared with April, 1903, when the quantity amounted to 16,287 cwts. and the value to £2,980. The receipts during January-April were 81,160 cwts. in excess of £23,312 as against 46,008 cwts. and £8,438 for the corresponding period of last year.

Chemical Wood Pulps.

The demand is well maintained. Sellers are firm in their quotations.

Mechanical Wood Pulps.

The market position is [illegible] condition. The [illegible] firm to the advance [illegible] makers still [illegible] able to [illegible] tions. [illegible] all this [illegible]

Esparto.

The [illegible] rather [illegible] nothing [illegible] steady at [illegible]

The [illegible] week [illegible] and the [illegible]

Arzew, landed Granton; 465 tons from Bona, landed Leith; 770 tons from Philippeville, Morris and Co., landed Dundee.

Home and Foreign Rags.

LONDON: Trade quiet; prices unchanged.—BRISTOL: There is a good all-round demand for cotton rags, and stocks are practically nil in the west of England.—MANCHESTER: Steady business; prices firm.—EDINBURGH: All grades are in request, at previous quotations.—DUBLIN: Slightly better demand.

The exports of PAPER STOCK last week were:—Africa, 57 tons; Belgium, 88 tons; Canada, 14 tons; France, 147 tons; Germany, 63 tons; Holland, 99 tons; Italy, 14 tons; United States, 234 tons.

In FOREIGN RAGS, French, Dutch and Belgian packers all report a brisk demand; German market quiet.

The receipts at British ports during the week ended Saturday last were as follows:—Austria, 39 bales; Belgium, 1,255 bales; Canada, 37 bales; Channel Islands, 79 bales; Denmark, 120 bales; France, 1,332 bales; Germany, 703 bales; Holland, 1,340 bales; Italy, 62 bales; Norway, 22 bales; Prussia, 57 bales; Turkey, 100 bales.

Straw Pulps.

Market firm.

Resin.

Great Britain imported during April last 112,982 cwts. of ROSIN of the value of £42,255, an increase of 32,025 cwts. and £20,292 compared with the month of April last year. During the four months ended April, the quantity amounted to 398,907 cwts. valued at £[illegible], as against 447,982 cwts. and £[illegible] for the corresponding period of 1903.

Starch.

The imports of STARCH, etc., during April amounted to 122,537 cwts. of the value of £[illegible], a decrease of 3,611 cwts. and £2,050 compared with the receipts for the corresponding month of last year. The total for the four months ended April amounts to [illegible] cwts. and £278,353, as against 493,728 cwts. and £[illegible].

Sizing.

The demand is still sustained at firm prices, stocks are low, and an advance in quotations is shortly anticipated.

The imports of GLUE, SIZE and GELATINE during April amounted to 19,138 cwts., as against 9,014 cwts. for April, 1903, the respective values being £38,176 and £10,986. During the four months Jan.-April, the imports amounted to 76,471 cwts. valued at £[illegible], as compared with 80,223 cwts. and £[illegible] for the corresponding period of last year.

Minerals, etc.

[illegible] rather better enquiry for the [illegible] CHINA CLAY, but the lower [illegible] somewhat neglected; shipping [illegible] MINERAL WHITE is moving [illegible] steady prices, and there is [illegible] passing for BARYTES, FRENCH CHALKS and TALCITE.

Digitized by Google

BUSINESS CARDS.

Rates for Weekly Insertions of announcements of this character may be obtained on application to W. JOHN STONHILL & CO., 58, Shoe Lane, London, E.C.

WATER SUPPLIES
NORTON'S PATENT
Abyssinian and Artesian Tube Wells.
LE GRAND & SUTCLIFF,
Hydraulic Engineers,
Magdala Works, Bunhill Row, London

IMPORTANT TO STEAM USERS.
Boiler Composition
For Removal of Scale in Steam Boilers.
MANUFACTURED BY
JAMES EMMETT, Ltd., Reuben Street, LEEDS.

JOHN CALDWELL & SONS, Nat. Tel. 390. T. A.: "Fents."
SUN MILLS, ANCOATS, MANCHESTER,
Wholesale Rag and Paper Stock
MERCHANTS.
Buyers of Shirt Cuttings, Underclothing Cuttings, Tailors' Cuttings; also all grades of New Rag Cuttings Warehouse Print Tabs, Fents, Twines, &c.
Terms—CASH. Bankers—L. & Y. Bank Shudehill.

R. W. SINDALL, F.C.S.,
15, Borough High St., London, S.E.
ANALYST and CHEMICAL ENGINEER,
WOOD PULP and PAPER TRADE EXPERT.
THE EXAMINATION OF PAPERS A SPECIALITY

DR. HENRY P. STEVENS, M.A., Ph.D., F.I.C., Analytical and Consulting Chemist—who is associated with Mr. Clayton Beadle, at 15, Borough, London Bridge—is open to take a limited number of PUPILS, for THEORETICAL and PRACTICAL INSTRUCTION in the Chemistry of Papermaking.

C. D. EKMAN,
GRAVESEND,
Chemical Engineer,
SULPHITE PULP and
PAPER TRADE EXPERT.
SCANDINAVIAN BUSINESS A SPECIALITY.

Telegraphic Address:—"RELIABLE." National Telephone, 1977.
J. BEAUMONT & CO.,
Wholesale Rag & Paper Stock
MERCHANTS.
ALL GRADES OF COTTON RAGS, NEW RAGS, BAGGING, Etc.
Pump St., Oldham Road, MANCHESTER.

CORNBROOK CHEMICAL Co.,
STOCKPORT LIMITED,
(Successors to ROBERTS DALE & Co. Manchester & Warrington
DRY & PULP COLOUR MANUFACTURERS
For the PAPER TRADE.
Paste Blues, Chromes, etc.
Any sample matched. Enquiries solicited.

BF V **BLEACHED SULPHATE,**
Kommanditbolaget C. Fr. Wærn & Co.,
GOTHENBURG.

JEAN FREESE,
Dealer, Importer, Agent.
China Clay,
Paper Stocks,
Sulphite Pulps,
Bleaching Powder.
310, Vanderbilt Building,
132, Nassau Street,
NEW YORK CITY.
Correspondence Solicited.

Wilh. MUNDS,
DRESDEN, SAXONY.
REPRESENTATIVE for 15 FACTORIES
CENTRAL OFFICE for the SALE of
Sulphite, Sulphate, Soda
& STRAW PULPS,
Bleached and Unbleached,
All Qualities and all Processes

Digitized by Google

THE WORLD'S

Wood Pulp Industry.

A Weekly Record of the Latest Information of Interest to Manufacturers of Chemical and Mechanical Wood Pulps, Agents, Buyers, and Others.

LONDON: 68, SHOE LANE, E.C.

British Imports.

THE imports of wood pulp into the United Kingdom during the periods mentioned were:

	MECHANICAL.		CHEMICAL.	
April:	Tons.	£.	Tons.	£.
1904	19,373	43,450	13,337	97,865
1903	27,139	62,863	17,971	125,101
1902	25,111	64,173	10,941	90,549
Jan.-April:				
1904	89,145	202,317	54,264	393,307
1903	84,237	203,408	59,932	441,739
1902	92,860	253,422	49,215	405,008

THE following classification shows the receipts of dry and wet wood pulps:—

MECHANICAL.

Dry.

April,	1904	228 tons	£1,047
,,	1903	473 ,,	2,348
,,	1902	340 ,,	2,081
Jan.-April,	1904	2,548 ,,	12,443
,,	1903	2,284 ,,	12,273
,,	1902	2,654 ,,	18,269

Wet.

April,	1904	19,145 tons	£42,412
,,	1903	26,666 ,,	60,515
,,	1902	24,771 ,,	62,092
Jan.-April,	1904	86,597 ,,	189,874
,,	1903	81,953 ,,	191,135
,,	1902	90,206 ,,	235,153

CHEMICAL.

Dry.

April,	1904	11,478 tons	£90,587
,,	1903	14,226 ,,	111,340
,,	1902	9,960 ,,	86,375
Jan.-April,	1904	46,215 ,,	382,507
,,	1903	51,983 ,,	411,132
,,	1902	44,796 ,,	381,242

Wet.

April,	1904	1,859 tons	£7,278
,,	1903	3,745 ,,	13,761
,,	1902	981 ,,	4,224
Jan.-April,	1904	8,049 tons	£30,800
,,	1903	7,949 ,,	30,607
,,	1902	4,419 ,,	23,766

THE April imports of wood pulp show a heavy falling off compared with the corresponding month of last year, amounting to 245 tons of dry and 7,521 tons of wet mechanical, with shrinkages in value of £1,301 and £18,103 respectively. In chemical pulp there is a decrease in imports of 2,748 tons dry and 1,886 tons wet, with losses in value of £20,753 and £6,438 respectively.

THE total imports of wood pulp during January-April last (143,409 tons of the value of £595,624) show a decrease of 760 tons and £49,523 compared with the corresponding period of last year. Whilst 4,808 tons more of mechanical were received, the value shows a reduction of £1,091; in chemical the receipts show a comparative decline of 5,668 tons and £47,332.

THE arrivals at British ports during the week ended April 30th were as under from the countries mentioned:—

CHEMICAL.

Dry.

Sweden	2,145 tons	£17,155
Norway	1,254 ,,	9,685
Portugal	99 ,,	1,000
Germany	68 ,,	514
Holland	20 ,,	240
Russia	20 ,,	170

Wet.

Norway	60 tons	£250

MECHANICAL.

Dry.

Norway	50 tons	£220
Sweden	20 ,,	90

Wet.

Norway	3,402 tons	£6,801

Digitized by Google

Norwegian Exports.

THE following figures show the exports of chemical and mechanical wood pulps from Norwegian ports (including Swedish transit goods):—

	MECHANICAL.		CHEMICAL.	
	Dry.	*Moist.*	*Dry.*	*Moist.*
February:	Tons.	Tons.	Tons.	Tons.
1904	1,108	30,251	10,485	1,599
1903	710	12,827	9,405	1,163
1902	1,090	23,892	8,911	809
Jan.-Feb.:				
1904	2,608	54,336	18,611	2,612
1903	3,539	34,102	17,911	2,184
1902	3,476	54,568	17,913	1,381

Germany.

THE Konigsberger Zellstoff Fabrik A.G., in Konigsberg, have under consideration an increase of capital from 1,250,000 marks to 2,250,000 marks. The company is commencing the construction of an additional chemical pulp factory in Konigsberg.

United States.

THE wood pulp market, according to New York advices, is firm. For chemical pulps there is a well maintained demand at high prices. A scarcity of soda fibre is reported. High prices rule for mechanical wood pulps, but buyers are slow to respond.

Canadian Wood Pulp Industry.

MR. GEORGE JOHNSON, Dominion Statistician, has supplied the following advance figures relating to the wood pulp industry of Canada for the calendar year 1903. There were 39 mills which had an output of 275,619 tons of wood pulp. Of this quantity, 187,871 tons were mechanical pulp, 84,808 sulphite, and 2,940 soda. The corresponding quantities for 1902 were: Mechanical, 155,210 tons; sulphite, 76,735 tons, and soda, 9,044 tons. This shows an increase of 34,630 tons in 1903. The increase is distributed: Sulphite, 8,073; mechanical, 32,661 tons; soda showing a decrease of 6,104 tons. The total value of the output of 1903 was 5,219,892 dols. There are several large mills in course of construction, or which, being finished, did not operate during the year 1903. Two or three firms have gone out of business or manufacture only paper where before they made pulp.

NINE of the thirty-nine mills manufacture sulphite pulp and three soda pulp. Twenty-seven manufacture mechanical pulp, and five make both chemical and mechanical. Taking the returns of thirty-nine mills, the average time the mills ran during the year was nearly nine months.

THE power to drive the mills is chiefly derived from water. Of a total power equal to 110,690 horse-power, 102,960 is water power.

THE growth of the industry is considerable. In the census of 1881 there were five establishments with an output of 63,000 dols. In 1891 there were twenty-four, with an output of 1,057,810 dols. The census returns for 1901 have not yet been tabulated. For 1903 the returns to the Statistical Branch preparing the Year Book show, as given above, thirty-nine establishments, with an output of 5,219,892 dols.

OF the product of Canadian mills, the Customs returns show that during the calendar year 1903 the export amounted to 3,013,441 dols., leaving 2,206,451 dols. for home use. In a general way, therefore, the Canadian export is about 57 per cent. of their production. Of the 3,013,441 dols. worth exported by Canada in 1903, Great Britain took 865,826 dols., the United States 1,899,448 dols. and other countries 248,167 dols.

IT is pointed out that the market for wood pulp in the United Kingdom is large. In the calendar year 1903 the requirements of Great Britain were of the value of 12,194,224 dols., of which 68·7 per cent. was chemical pulp. Canadian export in 1903 to Great Britain was about 7·1 per cent. of her needs.

TO OUR READERS.—When writing to advertisers please mention the *World's Paper Trade Review* as the source of information.

A Stämpelbok,

Or Book of the Trade Marks of the Chemical and Mechanical Wood Pulp Mills in Sweden and Norway.

Compiled by Mr. K. VON HOFSTEN, Gothenburg, Secretary to the Association of Scandinavian Pulp Makers (Swedish Section).

This Book not only contains the Shipping Marks of each Mill, but gives also full particulars about their Names, Owners, and Production; it should therefore prove a Most Useful Guide to anyone connected with the Pulp Industry in Scandinavia.
In One Volume, in the ENGLISH LANGUAGE, 21/- net, post free
SOLE AGENTS FOR THE U.K.

W. JOHN STONHILL & CO., 58, Shoe Lane, LONDON, E.C.

"Farben des Papierstoffs"

(DYEING PAPER PULP).
BY JULIUS ERFURT.

A Practical Treatise for the use of Papermakers an Others. The only Work on the Subject.

GERMAN EDITION,
Containing 145 Samples of Paper Dyed in the Pulp.
Post Free - - - - 12/6.

AN ENGLISH EDITION
of this Work is Now Ready, with 157 Samples of Paper Dyed in the Pulp.
Post Free, 15/-; Abroad, 20/-.

W. JOHN STONHILL & CO., 58, SHOE LANE.

Digitized by Google

BRITISH IMPORTS OF CHEMICAL AND MECHANICAL WOOD

For the Week Ended April 30th, 1904.

SPECIALLY COMPILED FOR

THE BRITISH WOOD PULP ASSOCIAT

An Official Account of the Registered Quantities and Values of Chemical Wood Pulp imported at the various ports of the United

CHEMICAL—DRY.

Date.	Ports.	Vessel.	Port shipped.	Packages.	Quantity.	Value.	Imported
1904.					Tons.	£	
Query	London	Bonheur	Christiania	400 bales	50	160	Berner & Nielsen
March 24							
Query							
April 2	,,	Polina	Uddevalla	300 ,,	25	135	Johnsen, Jorgen
,, 23	,,	Theresia	Gothenburg	350 ,,	25	225	Fry, Smith & Co.
,, 25	,,	Silvio	Norrkoping	500 ,,	40	350	A. E. Reed & Co.
,, 25	,,	Sirona	Soderhamn	500 ,,	37	330	Thomas Strand
,, 25	,,	Patriciar	Kotka	400 ,,	30	240	A. E. Reed & Co.
,, 26	,,	Silvio	Norrkoping	600 ,,	40	360	Andrew & Co.
,, 26	,,	Sirona	Soderhamn	60 ,,	10	63	C. Shaw & Lovell
,, 27	,,	Prosun	Folla	500 ,,	30	225	Andrew & Co.
,, 27	,,	,,	,,	400 ,,	30	175	,, ,,
,, 28	,,	Ring	Gothenburg	350 ,,	25	193	Philippi & Grun
,, 28	,,	Father	Skoga	2,200 ,,	175	1,650	Henderson, Urie
,, 28	,,	Prosun	Drammen	1,600 ,,	100	1,700	Becker & Co.
,, 29	,,	Father	Gothenburg	500 ,,	40	300	Allison & Co.
,, 29	,,	,,	,,	500 ,,	100	750	,, ,,
,, 29	,,	Prosun	Folla	600 ,,	50	400	A. E. Reed & Co.
Query							
April 20	Liverpool	Delta	Drammen	500 ,,	20	140	E. Sanderson & Co.
,, 24	Bristol	Sir Walter	Oporto	1,600 ,,	80	1,000	Turner, Edwards
,, 25	Hull	Arinto	Gothenburg	50 ,,	5	35	T. Wilson, Sons
,, 25	,,	Angelo	Christiania	950 ,,	60	420	,, ,,
,, 28	,,	Salno	Drontheim	60 ,,	10	75	,, ,,
,, 30	,,	Calypso	Gothenburg	500 ,,	30	210	Henderson, Urie
,, 30	,,	,,	,,	976 ,,	25	190	Milne & Co.
,, 15	Manchester	Gio	Sarpsborg	600 ,,	20	201	Kellner Partin
							Stora Kopparb
,, 28	,,	Starlight	Skutskar	2,400 ,,	250	2,400	Aktiebolag
,, 29	,,	,,	,,	1,500 ,,	150	1,080	W. G. Taylor &
,, 29	,,	,,	Skutskar	1,500 ,,	175	1,475	,, ,,
,, 30	Newcastle	Royal Dane	Hamburg	70 ,,	10	112	Tyne Steam Shi
,, 19	Preston	Helge	Gothenburg	600 ,,	75	562	Berner & Nielse
,, 29	,,	,,	,,	1,500 ,,	200	1,600	Becker & Co.
,, 30	,,	Dania	Drontheim	1,500 ,,	170	1,275	Johnsen, Jorgen
,, 30	,,	,,	,,	1,500 ,,	250	1,988	H. Tyrer & Co.
,, 26	South Shields	Sterling	Christiania	600 ,,	60	420	P. H. Matthiesse
,, 29	Glasgow	Thelma	Gothenburg	320 ,,	40	275	Henderson, Urie
,, 29	,,	,,	,,	360 ,,	27	196	Glen & Co.
,, 28	Grangemouth	Jeanne d'Arc	Sodhesund	350 ,,	40	260	J. T. Salvesen &
,, 28	,,	,,	Christiania	560 ,,	68	492	,, ,,
,, 25	Granton	Albert Edward	Gothenburg	913 ,,	125	1,000	Chr. Salvesen &
,, 25	Leith	Reval	Reval	92 ,,	20	120	Wm. Thomson &
,, 26	,,	Dresden	Stettin	152 ,,	30	200	J. Currie & Co.
,, 27	,,	Marna	Trondhjem	120 ,,	15	105	Johnsen, Jorgen
,, 28	,,	Breslau	Hamburg	171 ,,	23	126	J. Currie & Co.

CHEMICAL—WET.

					Tons.	£	
1904.							
April 25	Hull	Angelo	Christiania	250 bales	50	200	T. Wilson, Sons
,, 26	,,	Montebello	,,	67 ,,	10	50	Berner & Nielsen
,, 12	Manchester	Skrim	Skien	1,500 ,,	300	1,350	S. W. Boyse &

No goods delivered to this entry.

MECHANICAL—DRY.

					Tons.	£	
1904.							
April 29	Preston	Helge	Gothenburg	136 bales	20	90	Becker & Co.
,, 27	Teignmouth	Viken	Drammen	500 ,,	50	220	Reed & Smith

Digitized by Google

MECHANICAL—WET.

Date.	Ports.	Vessel	Port whence.	Packages.	Quantity.	Value.	Importer.
1904.					Tons.	£	
April 26	London ...	Bonheur ...	Christiania ...	750 bales	75	167	Andrews & Co.
,, 27	,, ...	Prosum ...	Drammen ...	600 ,,	75	178	Johnsen, Jorgensen & Wettre
,, 28	,, ...	,, ...	,, ...	1,000 ,,	100	225	Becker & Co.
,, 28	,, ...	,, ...	,, ...	2,500 ,,	250	615	,,
,, 25	Grimsby ...	Prins Oscar ...	Kragero ...	6,050 ,,	1,210	2,723	,,
,, 25	Manchester ...	Spurt ...	Christiania ...	141 ,,	24	53	R. F. Sanderson & Co.
,, 25	,, ...	Gro ...	Sarpsborg ...	7,276 ,,	910	1,819	Kellner Partington Paper Pulp
,, 26	South Shields	Sterling ...	Christiania ...	600 ,,	160	340	P. H. Matthiessen & Co. [Co.
,, 26	,, ...	,, ...	,, ...	50 ,,	5	13	Becker & Co.
,, 27	Teignmouth...	Viken ...	Drammen ...	1,115 ,,	223	540	Reed & Smith
,, 27	,, ...	,, ...	Christiana ...	2,000 ,,	200	460	,,
,, 19	Aberdeen ...	Girdleness ...	Drammen ...	600 ,,	70	193	Becker & Co.
,, 28	Grangemouth	Jeanne d'Arc ...	Tofte ...	800 ,,	100	375	J. T. Salvesen & Co.

Akt.-Ges. für Maschinenpapierfabrikation Aschaffenburg,

MANUFACTURERS OF

BLEACHED and UNBLEACHED

Sulphite Wood Pulp

— Mitscherlich and Ritter-Kellner Systems —

Of finest quality, excellent strength, length of fibre and colour. Daily production 120—130 tons dry weight.

Mills at { *Aschaffenburg a. Main. Stockstadt a. Main.* / *Walsum a. Rhein (formerly Niederrheinische Zellstoff A.-G.).*

Sole Agent: HARRY B. WOOD, CATHEDRAL STREET, MANCHESTER.

COURTELARY WOOD PULP WORKS CO.,

With which is Amalgamated

ROUBACH & CO., of LUNEVILLE.

Pure Rag Pulps

BLEACHED AND UNBLEACHED,

Also PULPS from LINEN, COTTON, CORDAGE, &c.

Factory: COURTELARY, SWITZERLAND. Depot: LUNEVILLE.

Orders and Enquiries to be addressed to

L. SCHNÉEBERGER, 193, Faubourg Poissonniére, PARIS.

DR. C. WURSTER'S PATENTED Pulping Engines & Kneaders NEARLY SO AT WORK.

LARGE PATTERN—THREE SIZES.

PULPING-UP 3, 6, and 9 TONS of Dry Papers or Pulp in 24 hours.
Power:—5-h.p., 8-h.p., and 12-h.p. Prices:—£125, £150, and £200.

SMALLER PATTERN—For Clean Papers only.

PULPING-UP HALF-A-TON to ONE TON of Dry Paper in 24 hours. 2 to 4-h.p.
Built in Iron, £75, £90, and £100.

For Better Quality Papers, Trough and Propellers made of Brass:—£100, £125, & £150.

Special Machines for Unsorted Paper.

These Machines do not grind, cut up, or wet the fibres, and, as the state of beating and refining is unaltered, neither colour nor sizing being affected, and impurities not touched, "Broke" can be re-used for the same quality of paper again.

For Particulars apply to **Dr. C. WURSTER,** 29, Abbey Road, St. John's Wood. LONDON, N.W.

Digitized by Google

Papermaking Materials.

The following statistics show British imports and exports of papermaking materials:—

IMPORTS.

During April:—

	1902. Tons.	1903. Tons.	1904. Tons.
Wood Pulp ...	36,852	45,110	32,710
Esparto ...	17,805	16,194	12,441
Rags	2,116	2,163	2,125
Other Materials	—	—	—
	£	£	£
Wood Pulp ...	154,772	187,964	141,324
Esparto ...	61,037	57,580	45,589
Rags	18,390	17,656	18,087
Other Materials	8,695	7,607	7,582

During January-April:—

	1902. Tons.	1903. Tons.	1904. Tons.
Wood Pulp ...	142,075	144,169	142,409
Esparto ...	68,999	62,202	64,771
Rags	6,968	6,909	7,697
Other Materials	—	—	—
	£	£	£
Wood Pulp ...	658,430	645,147	595,624
Esparto ...	252,333	225,595	232,634
Rags	62,228	63,704	68,002
Other Materials	31,977	31,269	29,545

EXPORTS.

Rags and other materials:—

	1902. Tons.	1903. Tons.	1904. Tons.
April	6,281	6,049	7,138
January-April	21,605	25,605	26,493
	£	£	£
April	35,472	34,080	38,689
January-April	122,649	136,023	139,499

Rags (Foreign):—

	1902. Tons.	1903. Tons.	1904. Tons.
April	773	1,366	1,088
January-April	2,925	4,307	4,007
	£	£	£
April	6,242	8,994	8,959
January-April	24,857	28,187	24,578

Other Materials (Foreign):—

	1902. £	1903. £	1904. £
April	4,146	5,406	4,843
January-April	14,080	16,820	17,166

AMERICAN IMPORTS OF Paper, Paper Stock, Chemicals, &c.

The following is the latest weekly list, compiled from official returns, of American imports from the ports mentioned:—

Paper.

ANTWERP.—New York: 10 cases, W. H; 22 cases, Hensel, Bruckmann and Lorbacher; 10 cases, Dejonge and Co.; 20 cases, Dingelstedt and Co.; 10 cases, Sheldon and Co.; 3 cases, L. C. Wagner.

BREMEN.—New York: 4 cases, George Meir.

GLASGOW.—New York: 42 bales, Baldwin Bros.; 7 bales, Emmerich and Co.

HAVRE.—New York: 3 cases. P. A. Fresse.

HAMBURG.—New York: 10 cases, A. Kraut; 119 cases, Dejonge and Co.; 50 cases, Stone and Co.; 102 packages, Dietzgen and Co.; 4 cases, Stursberg, Schell and Co.; 5 cases, Dietzgen and Co.; 38 cases, American Tobacco Co. Boston: 7 cases, Brown and Co.; 8 cases, Carter, Rice and Co.

LIVERPOOL.—New York: 71 cases, Hermann Lips; 1 case, Anthony and Scovill Co.; 110 cases, American Tobacco Co.; 21 cases, Western Union Telegraph Co.; 13 cases, Kupfer Bros. Boston: 1 case, Carter, Rice and Co.; 16 cases, B. D. Webber.

LONDON.—New York: 6 cases, G. A. and E. Meyer; 25 bales, W. H. S. Lloyd.

MANCHESTER.—Boston: 4 cases, Downing and Co.

ROTTERDAM.—New York: 112 cases, Amsinck and Co.; 22 cases, Dingelstedt and Co.; 3 cases, Dennison Manufacturing Co.; 9 cases, Miller, Sloan and Wright; 17 cases, J. W. Hampton; 6 cases, American Tobacco Co.

YOKOHAMA.—New York: 40 cases, American Trading Co.; 5 cases, Frame and Co.

Manillas.

ANTWERP.—New York: 212 bales, A. Kazenstein; 42 bales, Castle, Gottheil and Co.; 62 bales, F. Salomon and Co.

COPENHAGEN.—New York: 65 bales, F. Salomon and Co.

GLASGOW.—Boston: 39 bales, Hollingsworth and Vose Co.

HAMBURG.—New York: 221 bales, Salomon Bros.; 77 bales, F. Salomon and Co. Boston: 28 bales, F. Salomon and Co.

HULL.—Boston: 21 bales, Butterworth and Co.

LEGHORN.—New York: 18 bales, Castle, Gottheil and Co.

Rags.

ANTWERP.—New York: 351 bales, A. Kazenstein; 78 bales, Salomon Bros.; 171 bales, Goldman, Sachs and Co.; 230 bales, A. Saloman; 175 bales, Millar and Co.; 120 bales, Train, Smith Co.; 424 bales, Butterworth and Co.

COPENHAGEN.—New York: 61 bales, F. Salomon and Co.

GENOA.—New York: 78 bales, Castle, Gottheil and Co.

GLASGOW.—Boston: 192 bales, Train, Smith and Co.; 49 bales, True and McClelland.

HULL.—New York: 75 bales, M. Gottesman. Boston: 45 bales, True and McClelland; 666 bales, Train, Smith and Co.; 26 bales, Butterworth and Co.; 40 bales, Toronto Mill Stock Co.

HAMBURG.—New York: 56 bales, Millar and Co.; 92 bales, Salomon Bros. and Co. Boston: 708 bales, Salomon Bros.

Digitized by Google

LEGHORN.—New York: 180 bales, Castle, Gotthiel and Co.; 35 bales, Castle, Gotthiel and Co.; 38 bales, Train, Smith and Co.; 160 bales, Castle, Gotthiel and Co.

LIVERPOOL.—New York: 265 bales, Atterbury Bros.; 320 bales, Millar and Co.

LONDON.—Boston: 97 bales, Wolf and Sons.

NAPLES.—Boston: 97 bales, Wolf and Sons.

ROTTERDAM.—New York: 175 bales, Salomon Bros.; 365 bales, Millar and Co.

Waste Paper.

GLASGOW.—Boston: 66 bales, Crocker, Burbank and Co.

HULL.—Boston: 100 bales, Crocker, Burbank and Co.

LIVERPOOL.—New York: 13 bales, Millar and Co.

LONDON.—Boston: 4 bales, American Express Co.; 93 bales, Butterworth and Co.

MANCHESTER.—Boston: 137 bales, Butterworth and Co.

Wood Pulp.

ANTWERP.—New York: 246 bales, 50 tons, R. Helwig.

COPENHAGEN.—New York: 1,421 bales, 175 tons, Bertuch and Co.

HAMBURG.—Boston: 560 bales, Perkins, Goodwin and Co.; 80 bales, Aspergrain and Co.

HULL.—Boston: 500 bales, Perkins, Goodwin and Co.

MANCHESTER.—Boston: 440 bales, Page Newell and Co.

ROTTERDAM.—New York: 124 bales, 15 tons, Castle, Gottheil and Co.

Bleaching Powder.

HAMBURG.—Boston: 590 casks, A. Klipstein.

LIVERPOOL.—Boston: 440 casks, J. L. and D. S. Riker. New York: 18 casks, J. L. and D. S. Riker.

Soda Ash.

LIVERPOOL.—New York: 22 casks, Churchman and Co. Boston: 33 tierces, Linden and Meyer.

MANCHESTER.—Boston: 40 casks, Linden and Meyer.

Sizing.

HULL.—Boston: 183 bags, Butterworth and Co.

LIVERPOOL.—Boston: 357 bags, Butterworth and Co.

MANCHESTER.—Boston: 85 bags, Baeder, Adamson and Co.; 117 bags, Train, Smith and Co.; 89 bags, Butterworth and Co.

China Clay.

LIVERPOOL.—Boston: 304 casks, J. Richardson; 250 casks, L. A. Salomon and Co.

TOSSWILL AND ADIE, LTD., KIDDERMINSTER.—Lien registered April 29th, for £4,000 five per cent. debentures, pursuant to an order of the High Court of Justice, dated April 19th; no trustees; charged on the undertaking and all the property, including the uncalled capital.

Exports of British Paper.

The following returns show the exports of British paper during the week ended Saturday last:—

From London.

PRINTINGS.—To Australia, 791 cwts.; Africa, 776 cwts.; Belgium, 79 cwts.; Brazil, 19 cwts.; Cape, 70 cwts.; China, 1,569 cwts.; Egypt, 18 cwts.; France, 830 cwts.; Gibraltar, 18 cwts.; Holland, 364 cwts.; India, 691 cwts.; Japan, 521 cwts.; Malta, 12 cwts.; New Zealand, 1,179 cwts.; Sierra Leone, 1 cwt.; Straits Settlement, 23 cwts.; Sweden, 6 cwts.; United States, 15 cwts.; W. Indies, 650 cwts.

WRITINGS.—To Australia, 288 cwts.; Austria, 11 cwts.; Argentine, 25 cwts.; Africa, 178 cwts.; Belgium, 7 cwts.; Brazil, 12 cwts.; Cape, 31 cwts.; Canada, 8 cwts.; China, 104 cwts.; Egypt, 10 cwts.; France, 148 cwts.; Germany, 32 cwts.; Holland, 16 cwts.; India, 216 cwts.; Japan, 11 cwts.; Malta, 9 cwts.; New Zealand, 482 cwts.; Portugal, 17 cwts.; Sierra Leone, 7 cwts.; Spain, 12 cwts.; S. Settlements, 21 cwts.; W. Indies, 2 cwts.

OTHER KINDS.—To Australia, 891 cwts.; Austria, 11 cwts.; Argentine, 7 cwts.; Africa, 112 cwts.; Belgium, 80 cwts.; Brazil, 2 cwts.; Cape, 173 cwts.; China, 11 cwts.; Channel Isles, 141 cwts.; France, 75 cwts.; Germany, 17 cwts.; Holland, 25 cwts.; India, 79 cwts.; Japan, 7 cwts.; N. Zealand, 277 cwts; Portugal, 50 cwts.; Spain, 29 cwts.; S. Settlement, 37 cwts.; United States, 31 cwts.; W. Indies, 20 cwts.

From Glasgow.

PRINTINGS.—To Canada, 148 cwts.; Cape, 108 cwts.; China, 419 cwts.; India, 257 cwts.; Japan, 652 cwts.; Norway, 14 cwts.

WRITINGS.—To Canada, 29 cwts.; India, 6 cwts.; Japan, 25 cwts.; N. Zealand, 15 cwts.; N.S. Wales, 75 cwts.

OTHER KINDS.—To Canada, 7 cwts.; Norway, 2 cwts.; United States, 25 cwts.

Foreign Strawboards, &c.

The imports of straw, mill, and wood pulp boards, etc., at British ports during the week ended Saturday last were:—

STRAWBOARDS.—From Belgium, 80 bales; Canada, 145 rolls; Germany, 600 bales; Holland, 8,086 bales, 53 rolls.

WOOD PULP BOARDS.—From Germany, 1,296 bales; Holland, 224 bales; Sweden, 98 bales; United States, 452 bales.

MILLBOARDS.—From Germany, 26 bales; Holland, 17,019 bales, 199 rolls.

PASTEBOARDS.—From Austria, 724 bales; Germany, 37 bales, 13 cases; Holland, 40 bales; Sweden, 16 bales; United States, 870 bales.

CARDBOARDS.—From Germany, 9 bales, 21 cases.

Digitized by Google

DIRECTORY.

Names and Addresses under these Headings will be charged for at the rate of 7/- per inch (12 insertions) for each card of two lines or under. Each additional line 4/- per inch extra. Fresh headings are inserted when necessary.

ARTESIAN TUBE WELLS.

MACRAND & SUTCLIFFE, 125, Bunhill Row, London, E.C. Artesian Well Engineers.

ANALYSTS.

CLENT, Herbert H., F.C.S., 22, Blackfriars Street, Manchester. Specialty—Wood Pulp Sampling.

ARTESIAN WELLS.

ABUNDANT WATER SUPPLIES Co., Engineers, 66, Victoria Street, S.W.

MEECH, J. & Co., Bear Lane, Southwark, London, S.E.

CHINA CLAY.

CLENT (JAMES) & SONS, Stoke-on-Trent. Manufacturers of Purified China Clay for Papermakers. Works at Tuncorn and Preston. Mines—Cornwall.

MELHUISH & LANTHERN CHINA CLAY Works, Tuncorn and Runcorn. Address J. Fletcher Paper & Stamford Place, Liverpool. 7383

CHINA CLAY Co., 4, St. Ann's Square, Manchester. Mines: St. Austell Cornwall. Stocks: Manchester, Preston, Runcorn Leith. 8855

FISHER, J. & Co., Truro, Cornwall.—Agents, W. H. Taylor and Co., Ltd., 83, Queen Victoria Street, London, E.C., and 20, St. Andrew's Square, Edinburgh.

W. SINGLETON BIRCH & SONS, Ltd., 15, Lupton Street, Manchester. Mines: Bosvesor, St. Austell, Cornwall.

COLOURS.

CLARDWELL, J. L. & Co., Cromwell Buildings, 11, Manchester Street, Manchester. Specialities: Mineral Black, Ven. Red, Ochres, and Umbers.

BINNERWOOD, Thos., & Co., Glasgow. Manufacturers of High Grade Colours of all classes. Samples submitted or quotations on application.

LEVINSTEIN LIMITED, Crumpsall Vale Works, Manchester. Warehouse, 21, Minshull Street, Manufacturers of Specialities for Paper Dyeing in all shades. Alkalies, Blues, Carbols, &c. Wholesale P.A. for Dyes.

The VILLIERS COLOUR Co., Matlock-Bath. Colours in every variety. Mineral Black. Washed Coloured Ochres and Umbers. Samples on request.

MINERAL WHITE.

BELVOIR, Newark-upon-Trent. The best makers in Newark, 1788.

CAFFERATA & Co., Newark-upon-Trent. Established over 40 years. Largest makers of Mineral White in the Kingdom.

HOWE, John & Co., Carlisle.

RAGS.

CHALMERS, R. & Co., Ltd., Bonnington, Leith.

SIZING, etc.

The GROVE CHEMICAL CO., Ltd., Appley Bridge, near Wigan, Lancashire. China Clay, Resin, Size, Aluminous Cake, Soda Ash, Starch, Painters' Size, etc.

STEEL & BRIGHT TOOLS.

MAKIN, Wm. & SONS, Sheffield. Established 1738. Roll Bars, Plates, Cutter Knives, Doctor Blades, etc.

STRAWBOARD CENTRES.

BOYD, HART & CO., Makers of Round, Square, and Square Centre Shells, 21, Exchange Square, Glasgow. Telegraphic address: "Strawtoare." 3541

TALC.

LASSALLE, Th., Montluçon, France.

GYPSUM & TERRA ALBA.

WINSER & Co. (GOTHAM Co., LTD.), 312, Deansgate, Manchester, and Kegworth Mills, near Derby. Established over 40 Years

VENTILATING AND INDUCED DRAUGHT FAN MAKERS.

SAVE ON YOUR COAL BILL by using our Induced Draft Fan. At Oldham with three Boilers we are doing work that previously required four and saving £20 a month in fuel. Write for particulars—SUTCLIFFE VENTILATING AND DRYING CO. Ltd., Cathedral Corner, Fennel Street, Manchester. Telephone No. 3919. Telegraphic Address: "VENTILATING."

WOOD PULP.

ALSING & Co., Ltd., 110, Cannon Street, London, E.C. Agents for the well-known "E.E." Soda Pulp; also Sulphite and Mechanical.

GRANT, W. & Co., 18, St. Andrew Square, Edinburgh. Agents for best shippers, Sulphite and Sulphate, Mechanical, Pine, Brown, Aspen.

WERTHEIM, A. & Co., Hamburg.

THE MANCHESTER ANILINE Co.,

20, High Street, Manchester.

SPECIALITIES:

MAGENTA, VIOLET, GREEN, METANIL YELLOW.

Mill-Hand Edition.

A Special Edition of *The World's Paper Trade Review* is published for supply only to bona-fide employees in Paper Mills.

The Annual Subscription is 6s. 6d., or 3s. 3d. for six months, PAYABLE IN ADVANCE.

New subscriptions are not accepted for any less period than six months, and must terminate at the end of a quarter, i.e., the last week in March, June, September, or December, and not at odd periods. Foreign subscribers must add, when remitting, the extra postage, i.e., 1s. 6d. for six months, or 3s. 0d. for the year.

The receipt of a copy in a COLOURED WRAPPER denotes the termination of a subscription.

Offices: 58, Shoe Lane, London, E.C.

Digitized by Google

Office of the WORLD'S PAPER TRADE REVIEW,

Telegrams: "STONHILL—LONDON." *68, Shoe Lane, London, E.C.*

CURRENT PRICES OF PAPERMAKING MATERIALS.

CHEMICALS.

Quotations are nominally as follows:

Alkali, Ammonia, 58%	...	f.o.b. Liverpool	£4	10 0
,, ,, 48%	...	,, ,,	4	5 0
Alum (Ground), tierces	...	,, ,, 2½%	5	10 0
,, barrels	...	,, ,, 2½%	5	12 6
,, tierces	...	,, Hull 2½%	5	5 0
,, ,,	...	f.o.b. Glasgow 2½%	6	0 0
,, (Lump) barrels	...	f.o.b. Liverpool 2½%	5	0 0
,, tierces	..	,, ,, 2½%	4	17 6
,, barrels	...	,, Hull 2½%	4	17 6
Alum tierces	...	London 2½%	5	7 6
,, ,,	...	f.o.b. Glasgow 2½%	5	10 0
Alumina Sulphate Bags	...	f.o.b. Tyne net	3	10 0
Aluminoferric Cake, slabs...		Liverpool	2	15 0
,, ,, tierces		,,	3	2 6
Alumina Cake, slabs	...	Glasgow	2	15 0
Blanc Fixe	...	f.o.b. Tyne net	5	15 0
Bleach	...	,, ,, net	4	7 6
,, (soft wood) ...	...	f.o.r. Lancs. net	4	7 6
,, (hard wood) ...	...	f.o.b. Liverpool net	5	0 0
,, (soft wood) ...	...	landed London net	4	15 0
Borax (crystals) ...	...	f.o.b. Liverpool net	13	0 0
,, (powdered) ...	...	... ...net	14	0 0
Caustic White, 76% ...	...	f.o.b. Liverpool net	10	10 0
,, ,, 74% ...	...	,, ,, net	10	5 0
,, ,, 70% ...	...	,, ,, net	9	15 0
,, ,, 70% ...	...	f.o.r. Lancs. net	9	12 6
,, ,, 60% ...	...	f.o.b. Liverpool net	8	15 0
Caustic Bottoms ...	...	f.o.r. Lancs. net	6	5 0
Chloride of Barium Casks		f.o.r. Hull net	6	0 0
Hypo-Sulphite of Soda	...	f.o.r. Tyne	5	0 0
,,		f.o.b. Tyne	5	5 0
Oxalic Acid	...	f.o.b. Liverp'l net	per lb.	2½
Salt Cake	...	f.o.b., ,,	1	17 6
Satin White	...	f.o.b London	5	0 0
Soda Ash, Carbonated, 52%		f.o.b. Liverpool net	6	2 6
,, ,, 48% ...		,, ,, net	6	0 0
Soda Ash, Carbonated 52% ...		f.o.r. Widnes net	6	0 0
Soda Ash, Carbonated 48% ...		f.o.r. Widnes net	5	17 6
Soda Ash, Caustic, 48% ...		f.o.b. Liverpool	6	5 0
Soda Ash Caustic 52% ...		,, ,,	6	7 6
Sal Ammoniac (1sts)	...	f.o.b. Liverpool	42	0 0
,, (2nds)	...	,, ,,	40	0 0
Soda Crystals	...	f.o.b. Tyne net	3	2 6
,, ...	...	ex ship Thames 2½%	3	5 0
,, ...	...	f.o.b. Liverpool 5%	3	7 6
Sulphate of Ammonia	...	,,	12	2 6
Sulphate of Copper ...	...	,, Liverpool 5%	21	10 0
Sulphur, rolls	...	f.a.s. works net	6	12 6
,, flowers ...	...	,, ,, ,,	7	12 6
,, recovered ...	...	,, ,, ,,	5	10 0

FOREIGN CHEMICALS.

F.o.b. Continental Ports:

Bleaching Powder, 35%-37% casks		f.o.b. Antwerp	4	5 0
Hypo-Sulphite of Soda, casks		f.o.b. Rotterdam nett	4	15 0
White Sugar of Lead, casks		f.o.b. Hamburg ...	24	10 0
Sulphate of Alumina, 14%-15% casks		f.o.b. ...	3	7 6
Zinc Oxide	...	f.o.b. less 2½%	22	10 0

STRAW PULPS.

Prices, c.i.f. English and Scotch Ports.

German, dry, No. 1	... ...		£13	0 0
,, ,, No. 2	... ...		12	0 0
Dutch	... ...		11	0 0

CHEMICAL WOOD PULPS.

GREAT BRITAIN.

Prices, c.i.f. London, Manchester, Granton, etc.

Sulphite, Bleached	... ...	...£11	10 0	—12 0 0
,, Unbleached, 1st quality	...	9	0 0	—9 5 0
,, ,, Ordinary	...	8	5 0	—8 15 0
,, ,, 2nd quality	...	8	0 0	—8 5 0
Soda, ,, ... 1st quality	...	7	15 0	—8 0 0
,, ,, ... 2nd ,,	...	7	5 0	—7 10 0

FRANCE.

C.i.f. Rouen per 100 kilos. (2 cwt.).

Sulphite, Unbleached, 1st quality ...	Frs.	22—23
,, Ordinary		20—21
,, ,, 2nd quality ...		19—20
,, Bleached, Superior		31—32
,, ,, Inferior		26—29
Soda and Sulphate, Unbleached ...		19—20
,, ,, 2nd quality ...		18—19

UNITED STATES.

Sulphite, American, Bleached	2.4cc—	2.50
,, ,, Unbleached ...	1.85 —	2.10
,, Foreign, Bleached	3 —	3.30
,, ,, Unbleached	1.95c—	2.15c
Soda, American, Bleached	2.12c—	—
Soda, American Unbleached	2.50c—	2.60c
,, Foreign Bleached	2.55 —	2.85
,, ,, Unbleached	1.80 —	1.90

MECHANICAL WOOD PULPS.

GREAT BRITAIN.

Prices, c.i.f. London, Manchester, Preston, Granton, etc.:

Pine, 50% moist, prompt delivery	...		£2	2 6
,, ,, forward delivery	...		2	5 0
,, dry, prompt delivery	...	4 5	0—4	10 0
,, ,, forward delivery	...	4 15	c—5	0 0

FRANCE.

Prices c.i.f. Rouen, per 100 kilos. (2 cwt.).

Pine, 50% moisture	Frs. 11	—11.50
,, dry	11	—11.50
Aspen ,, fine, dry	15.50	—16.50
Brown (half-chemical), 50% moisture ...	11	—11.50
,, ,, dry	11	—12

UNITED STATES.

F.o.b. Mill, nearest port (per 2,000 lbs.)	15 dols.

ESPARTO.

Prices ex-ship London, or f.o.r. Leith, Granton, Gardon and Tyne Docks, are nominally as follows:—

Spanish—	Fair to Good	£4	7 6	—4 12 6
	Fine to Best	5	2 6	—5 7 6
Oran—	Fair to Good	3	3 9	—3 6 3
	First Quality	3	8 9	—3 12 6
Tripoli—	Hand-Picked	3	8 9	—3 10 0
	Fair Average	3	3 9	—3 5 0
Bona and Philippeville ...	... ...	3	10 0	—3 12 6
Siax and Gabes ...	... ...	3	8 9	—3 10 0

ESPARTO PULP.

Prices, c.i.f. Rouen, per 100 kilos (2 cwt.).

First quality	Frs. 42.	—13.
Second quality	40.	—11.

Digitized by Google

FOREIGN RAGS.

FRENCH.

Quotations f.o.b. Rouen

Extra Linens	—	Blue Linen No. 1	8/0
White Linens, No. 1	22/0	Fustians	4/0
" No. 2	17/0	Old Bagging (solid)	2/9
" No. 3	14/0	" (common)	1/0
" No. 4	8/0	Hemp, tarred in coils	11/0
" No. 5	4/6	Hemp strings	10/0
Gray Linens (strong)	13/0	NEW CUTTINGS.	
" (extra)	16/0	White Linen,	33/0
White Cotton, No. 1	13/0	Unbleached Linen	30/0
" No. 2	9/0	Gray Linen	23/0
" No. 3	7/6	Extra White Cotton	19/0
" No. 4	6/0	Ordinary "	18/0
" No. 5	3/0	Curtain Cuttings	17/0
White Knitted	17/0	Stay "	15/0
Muslins	6/0	Extra Light Prints	13/0
Extra Light Prints	8/0	Unbleached Cotton	21/0
Light Prints	4/0	Oxford	19/0
Dark Prints	1/6	Flanellettes	15/0
Blue Cotton, No. 1	5/6	Blue Cotton	10/0

GERMAN.

Quotations are as follows

NWC	19/0	Dark Cottons	2/10
SPFFF	20/0	Grey Linens I.	11/10
SPFFF and SPFF	18/0	" II.	7/0
SPFF	15/0	CSPFFF	13/10
SPF	12/0	CSPFF	9/10
Light Prints	7/0	CSPF	7/5
Fustians	3/10	Dark Blues (selected)	7/0
Mixed Coloured Cottons	3/10	Jute, No. I.	3/0
		" No. II.	1/0

PRUSSIAN.

C.i.f. London, Hull, or Leith.

SPFF	13/6	CC (cotton)	3/0
SPF	9/0	Jute I	2/3
FG	8/0	" II	1/6
LFB	6/3	Rope I	7/3
FF	3/0	" II	4/3

BELGIAN;

Quotations, f.o.b. Ghent.

White Linens, No. 1	21/0	House Cloths	2/6
" " No. 2	16/0	Old Bagging (solid)	3/0
" " No. 3	12/0	" " (common)	2/6
Fines (Mixed)	12/0	NEW.	
Grey Linens (strong)	9/6	White & Cream Linens	5/0
" (extra)	14/0	White Cuttings	22/0
Blue Linens	8/0	Unbleached Cuttings	21/0
White Cottons No. 1	18/0	Print Cuttings	8/0
" No. 2	15/0	FLAX AND HEMP WASTE.	
Outshots No. 3	10/0	Flax Waste, washed and dri	10/0
Seconds No. 4	7/9	Fair	8/0
Prints (Light)	7/0	Flax Card Waste	6/0
Fustians (Light)	3/6	Hemp Waste, No. 1	8/0
Fustians (Dark)	2/0	" " No. 2	3/0
Black Cottons	3/0		
Hemp Strings (sat'r'd)	2/3		

DUTCH.

F.o.r. English ports.

Whites, No. 1	14/9	W. Manilla Rope (coils)	7/3
" No. 2	9/9	do. Tarred "	4/9
" No. 3	6/6	Canvas No. 1	14/0
Grey Linens	8/6	" No. 2	10/0
Clean House Cloth	3/0	" No. 3	6/0
Mixed Fustians	4/9	W. Untarred Rope	10/0
Coloured Prints	2/7½	Paper Shavings	
Dark Prints	2/1½	Free from wood	7/0
Blue Cottons	5/6	Mixed Bagging	2/7½
Light Lilac Cottons	7/0	Bright New Gunny	3/6
Muslins	9/9	New Bleached Cuttings	17/6
Mixed Hemp Rope Coils	8/3	Unbleached Cuttings	16/6
Broken (in bags)	6/0		

NORWEGIAN.

C.i.f. London, Hull, Tyne, and Grangemouth.

1st Rope (tarred)	8/3-9/0	2nd Canvas	7/6
2nd "	5/0-5/9	Jute Bagging	
Manilla Rope (white)	10/6-11/0	Gunny	3/0-3/3
Best Canvas	11/9-12/0	Mixed	2/0-2/6

TURKISH.

F.o.b. Constantinople (per 100 kilos)

Whites, 1st	Francs 10	Ropes, Thick	Francs 10
" 2nd	" 5	" Medium	" 12
Coloured	"	" Thin	" 15

STRAW.

Oat, ex steamer Thames	£1 15 0
Wheat " "	2 0 0

HOME RAGS.

LONDON.

N. White Cuttings	21/6-26/0	Canvas No. 1	14/0-15/0
Fines (selected)	19/6-21/0	" No. 2	9/6-10/0
" (good London)	17/0-17/6	" No. 3	5/0
Outshots (selected)	10/0-13/0	Mixed Rope	2/9-3/3
" (ordinary)	8/0-9/0	White Rope	4/0-4/6
London Seconds	1/6-1/9	White Manilla Rope	8/0-9/0
Country "	3/0-7/0	Coil Rope	4/0
London Thirds	0/9-1/3	Bagging	1/3-1/9
Country "	2/0	Gunny	2/0-2/6

BRISTOL.

Fines	17/6	Clean Canvas	13/6
Outshots	9/0	Second "	9/6
Seconds	5/0	Light Prints	5/6
Thirds	2/6	Hemp Coil Rope	9/0
Mixed Bagging	2/6	Tarred Manilla	7/0

MANCHESTER.

Fines	14/0-15/0	Blues	3/6-4/0
Outshots (best)	8/6-9/6	Bagging	2/3-2/6
" (ordinary)	7/6-8/0	" (common)	1/6-2/0
Seconds	4/0-4/6	W. Manilla Rope	5/0-10/0
Thirds	2/0-2/3	Surat Tares	2/9-3/0

EDINBURGH.

Superfines	15/0	W. Manilla Rope	9/6-10/0
Outshots	12/0	Tarred Manilla Rope	6/0
Mixed Fines	14/0	" Hemp Rope	8/0
Common Seconds	8/0	Rope Ends (new)	5/0
First "	11/0	" " (old)	3/0
Prints	6/0	Bagging	2/0-2/3
Canvas (best)	14/0	" (clean)	3/0-4/0
" 2nd	5/0		
Black Cottons	2/0		

GLASGOW.

Fines	12/6-16/0	Canvas No. 1	15/0
Blues	4/6	" No. 2	10/0
Common Blues	3/3	Manilla Rope	8/0
Bagging	4/0	Tarred Hemp	9/0

DUBLIN.

White Cuttings	16/0	Mill Bagging	2/6
Fines	9/0	White Manilla	8/0
Seconds	4/6	Tarred Hemp	6/0
Light Prints	1/6	Rigging	12.0
Black "	1/0		

JUTE.

Good White	£17 0 0	—	19 0 0
Good	14 10 0	—	16 10 0
Medium	12 0 0	—	13 0 0
Common	11 0 0	—	11 0 0
Rejections	9 10 0	—	10 0 0
Cuttings	5 0 0	—	8 0 0

WASTE PAPERS.

Cream Shavings	9/0	Small Letters	3/9
Fine "	8/0	Large "	5/0
Mixed "	4/3	Brown Paper	2/3
White Printings	7/9	Light Browns	3/9
White Waste	3/0	Dark "	2/6
Wood Pulp Cuttings	3/3	Books & Pamphlets	3/9
Blue Paper	2/0	Strawboard Cuttings	1/3
Crushed News	3/0	Jacquards	2/0

For Export 25s. per ton extra.

STARCH.

F.o.r. London, less 2½%

Maize— Crisp		£10 15 0
Pearl		10 10 0
Powder		11 0 0
Special		11 10 0
Farina— Prime		10 10 0
B.K.M.F.		14 0 0
Delivered:		
Rice— Special (in chests)	net	19 10 0
Crystal (in bags)	less 2½%	18 10 0
Granulated in bags)	"	17 10 0
Waste	"	13 0 0
Dextrine		14 0 0

ROSIN.

Quotations (ex wharf less 2½% discount) are as under:—

B/C	D	E	F	G	I	K	M	N	WG	WW
7/6	7/7½	7/9	8/0	8/1½	8/6	9/0	10/6	11/0	11/6	12/0

ROSIN SIZE.

Arledter make, 70 per cent. rosin, per ton ... £7 0 0

Digitized by Google

SIZING.

Prices are nominally as under:—

English Gelatine	Per cwt.	£3 0 0	—4 10	0
Foreign ,, ...	,,	3 0 0	—4 10	0
Fine Scotch Glues	,,	2 6	—2 10	0
Best Long Scotch Glues ...	,,	1 10 0	—2 0	0
Common Black	,,	1 13	0—2 0	0
"Town" Glues	,,	1 0	0—1 5	0
"Bone" Glues	,,	1 5	0—1 10	0
Foreign Glues	,,	1 0	0—1 5	0
Bone Size	,,		5 0—	8 0
Gelatine Size	,,		6 6—	10 0
Dry B.A. Pieces	,,	2 5	0—2 10	0
,, English Pieces	,,	1 10	0—2 0	0
Wet ,, ,, ...	,,		8 6—	9
,, Sheep Pieces	,,		3 0—	4 0
Buffalo Hide Shavings ...	,,	1 10	0—2	8 0
,, Picker Waste ...	,,	1 12	0—1	16 0

COLOURS.

Nominal Prices.

Mineral Black	Per Ton	£3	10 0
Black Feerless	,,	56	0 0
Ochre (English and Irish)	,,	*3	15 0
Ochre (French)	,,	*4	0 0
Pure Crawshay Turkey Red ...	,,	22	0 0
Red Oxide and Venetian Red	,,	*4	0 0
Umber (Derbyshire)	,,	*4	0 0
,, (Irish)	,,	2	0 0
Chrome (Pure)	Per Cwt.	2	10 0
Yellow (Imperial)	,,	0	14 0
,, (Bordeaux)	,,	0	12 6

*Higher Prices according to strength and shade.

PASTE COLOURS, with 40% of Colour (less 2½% d/d.)

Orange Pulp...	Per Cwt.	2	10 0
Golden Yellow Pulp	,,	1	16 0
Lemon Yellow Pulp	,,	1	16 0
Prussian Yellow	,,	1	16 0
Green (free from Arsenic)	,,	1	16 0
Paste Blue, 33%	,,	1	16 6
,, 40%	,,	2	2 3
,, 50%	,,	2	10 0

LIME.

Per ton, f.o.r. works ... . 1£/-

LOADINGS, etc.

China Clay, in bulk, f.o.b. Cornwall, 8s. 6d. to £1 5s. 6d. (highest grade) per ton, bags 5s., and casks 9s. per ton extra; delivered Lancashire, £2 (for best papers), and commoner qualities 22/ to 36/ per ton.; best f.o.r. London, in casks, £2 7s. od. per ton; f.o.b Liverpool, in 5 cwt. casks, £2 to £2 5s. 9d. for export.

French Chalk, W.E., W.O., and other brands, £2 17s. 6d. to £4 8s. od. per ton, according to quality, delivered in most Yorkshire and Lancashire towns, also f.o.b. Glasgow, Belfast and London.

Italian Chalk, finest brands—f.o.b. Manchester, Liverpool, or London—I.W.A., "Portland Mills," and "Swan" marks, £4 to £5 per ton of 10 bags.

Agalite, in bags, c.i.f. U.K. ports, £3 to £3 10s. per ton.

Paper Makers' Plaster, 14/ per ton and upwards delivered.

Superfine Hardening, delivered Mills, 50/ per ton and upwards.

Patent Hardening (2 ton lots), f.o.r. Lancs., £2 19s. 6d.

Mineral White (also known as Terra Alba, and Sulphate of Lime), per ton f.o.r. or boat at makers works:—

Superfine, best picked white, finely ground	18/ — 28/
Superfine, second quality	
Pottery, best quality	
Pottery, No. 2 quality	

Gypsum

Light Pink	6/6 — 16/
Seconds	
Brown	
Thirds, selected	

Terra Alba and Gypsum delivered any Lancashire or Yorkshire station about 10/ per ton extra, except Manchester, which is only 8/ per ton extra. Delivered London stations about 7/ per ton extra.

Bauxite, minimum alumina, 60%, 17s. f.o.b.

Sulphate of Alumina, £3 15s. od. to £4 12s. 6d. per ton delivered to Mills.

Sulphate of Barytes, No. 1, £3 4s. od.; No. 2, £2 12s. 6d No. 3, £2 2s. od.; No. 4, £1 15s. od. per ton, less 2½%.

Magnesite (containing 98% Carbonate of Magnesia), raw ground, £4 10s. od.; calcined, £8 10s. od.

Magnesite (in lump), £1 19s. 6d. per ton.

Satinite, £3 4s. 6d., in casks, f.o.b. Liverpool or Manchester.

Chloride of Zinc, £6 18s. 6d. per ton.

Books for Papermakers.

—o—

"ART OF PAPERMAKING," by ALEXANDER WATT. A practical handbook on the manufacture of paper, etc. 7s. 6d.

"CELLULOSE," by CROSS and BEVAN. An outline of the chemistry of the structural elements of plants. 12s.

"CELLULOSE, RESEARCHES ON," by CROSS and BEVAN. 6s.

"DYEING OF PAPER PULP," by JULIUS ERFURT. Translated into English by JULIUS HUBNER. A practical treatise for the use of papermakers and others. German edition, 12s. 6d. English edition, 15s.; Posted abroad, 20s.

"DIRECTORY OF PAPERMILLS, 1904." A list of the papermills in the United Kingdom, also of London wholesale stationers and the paper stainers of Great Britain. 2s. 6d.

"DIRECTORY OF FRENCH AND FOREIGN PAPER & BOARD MANUFACTURERS," 1903. This directory (in French) contains a list of papermakers, paper merchants, booksellers, etc., and articles on technical subjects. 9s. 3d.

"FACTORY BOOKKEEPING FOR PAPER-MILLS," by JOSEPH MACNAUGHTON. A system devised to meet practical requirements. 10s.

"NORDISK PAPPERS KALENDER, 1902." Scandinavian pulp and paper trade Directory. 4s.

"PRACTICAL PAPERMAKING," by GEORGE CLAPPERTON. A manual for papermakers and owners and managers of papermills. 5s.

"PAPERMAKERS' POCKET-BOOK," by JAMES BEVERIDGE. Concise information relating to engineering, chemical, and office and papermaking departments of the mill. 10s.

"PAPERMAKING," by CROSS and BEVAN. A text book of principles, presenting the subject to the reader according to its scientific perspective. Second edition, 12s. 6d.

"PRACTICAL TESTING OF RAW MATERIALS," by S. S. DYSON. 12s. 6d.

"SAMPLING OF WOOD PULP," by R. W. SINDALL. Methods of sampling for moisture tests. 2s.

"STAMPELBOK," by K. VON HOFSTEN. Book of the trademarks of the chemical and mechanical wood pulp mills in Sweden and Norway, in the English language. Edition for 1902. 21s.

"TABLES OF WEIGHT OF PAPERS" for ascertaining the weight of paper in grammes per square metre from different sizes of Paper in reams of 480 and 500 sheets; in English, French, and German. 2s. 6d.

"BULLETIN JOURNAL DES FABRICANTS DE PAPIER," a bi-monthly French paper trade journal. Annual subscription, £1 4s., including postage. A good Continental advertising medium, rates on application to the Sole British Agents as under.

—o—

Any of the above may be obtained, post free, on remittance with order to

W. JOHN STONHILL & CO.,
58, SHOE LANE, LONDON, E.C.

Digitized by Google

Commercial Intelligence.

Re THOS. McMULLON,
Printer and Stationer.

Under the failure of this debtor the first meeting of creditors was held last week, at the London Bankruptcy Court, before Mr. G. W. Chapman, official receiver. The debtor, described as of 2, Gresham-buildings, and 37, Wool Exchange, is at present undergoing a term of three years' penal servitude. At the time of his conviction he was secretary to Butterworth Brothers, New Zealand, Ltd., of 80, Coleman-street, at a salary of £300 a year. He also carried on the business of a printer and stationer at Wool Exchange in the name of Fleming and Co., which concern he purchased eighteen months ago for £110 from the trustee in bankruptcy of John Fleming. The debtor continued the business in the name of Fleming and Co., with the idea of presenting his son with it on attaining his majority. The trading was not a success, and the debtor paid into it further sums amounting to between £300 and £400 received from his secretarial income and from rents of various properties which he had. There was no printing plant on the premises, the work being put out with other firms. The chairman reported that the debtor had not filed the statement of his affairs, but he estimated his unsecured liabilities at £9,300, whilst the assets comprised shares estimated to be worth £600; cash at bank, £17; life policies, £30; two freehold houses in Wansteadroad, Snaresbrook, estimated to realise £1,000; and an equity in certain freehold property in Eglington-road, Plumstead, valued at £200. Total assets, £1,847. The debtor attributed his position entirely to the loss of about £10,000 by speculations on the Stock Exchange. In the absence of a quorum of creditors, and to give the debtor an opportunity to file his accounts the meeting was adjourned to Tuesday. Mr. Collens attended for the debtor.

Re WRIGHT and CO.,
Printers and Publishers.

The first meeting of creditors was held on Friday, at the London Bankruptcy Court, of William Wright, trading under the above style at 2, Amen-corner, Paternoster-row, E.C. It appeared from the debtor's statements that he commenced business on his own account in Temple-chambers some twelve years ago with a capital of £50. Two years later he took in a manager, to whom he gave a one-fourth share as consideration for looking after the business, and he (debtor) took over the Red Lion Hotel, Carisbrooke, which he carried on for two years. At the end of that period he relinquished his interest in the hotel, receiving a net sum of £24, and went back to the London business. A deed of partnership was entered into with the manager, who then became entitled to a one-half share of the business, but a year later the connection was severed, the debtor going out of the firm and receiving £200 in cash, with which he started his present business in 1897. The statement of affairs shows liabilities £253 8s. 9d. (unsecured £244 11s. 3d.); and assets £25 5s., consisting of fixtures £3, furniture £5, and book debts £17 5s. The debtor attributes his failure to bad debts and bad seasons, following the depression caused by the South African War. He submitted no offer, and the Chairman (Mr. Egerton S. Grey, official receiver) intimated that the case would remain in his hands to be wound up in the ordinary course of bankruptcy, the debtor's public examination being appointed for May 31st. Mr. Halsted Dale attended the meeting on behalf of the debtor. The following are the principal creditors, viz.:—

UNSECURED.

R. Barrett, 102, Pentonville-road, N.	£35
Bunker and Co., 32, Newgate-street, E.C. ...	13
Hadley and Sons, Furnival-street, Holborn ...	18
H. Hitchcock, Hildenborough	14
Hudson and Son, Birmingham	13
Ives and Son, Tonbridge	10
C. Mitchell, 4, West Harding-street, E.C. ...	15
Willis and Co., Lamb's-buildings, Bunhill-row, E.C.	18
Hammond and Co., Ltd., Birmingham	10

Re AMBROSE JESSE GRAYSTON,
Publisher, etc.

This debtor recently carried on business at 5, Danes-inn, Strand, and now resides at Glenfield, Frimley. For some years past he has been engaged in editorial work on educational subjects. In September, 1900, he left the firm by which he had been employed, taking with him a stock of copyrights, plates, etc., to the value of £4,000, and he started business as a publisher at 5, Danes-inn. The Pearson-Grayston Publishing Co. was subsequently registered to acquire that business, but nothing further was done with it. In June, 1902, the debtor entered into a contract to purchase an automatic picture machine business carried on by the Jactho Automatic Advertising Lamp Co. To litigation in connection with that transaction, to the unsuccessful carrying on of the publishing business, to law costs, and to the cost of the abortive attempt to convert the publishing business into a company, the debtor attributes his position. The statement of affairs filed by the debtor shows total liabilities £4,440 3s. 6d. (unsecured £1,400 3s. 6d.), and no available assets. In the absence of any offer by the debtor, the case was left in the hands of the official receiver to be wound up in the ordinary course of bankruptcy.

THE imports of waste paper, etc., at Boulogne last year amounted to 5,962 tons, and in 1902 to 6,362 tons.

ADVERTISE in this paper! It pays!!

Digitized by Google

New "Limiteds."

J. PEACH and SONS, Ltd.

Registered with a capital of £5,000, in £1 shares (2,000 preference), to acquire and carry on the business of printers and paper manufacturers carried on by Harrison and Sedgwick, at Brook-street Paper and Printing Works, Derby, under the style of J. Peach and Sons, and to adopt an agreement with T. H. Harrison and J. Sedgwick. Minimum cash subscription, £1,500. The first directors are G. M. Kerry, R. A. Blades, G. Heald, and H. H. Hillman. Qualification, £25. Remuneration as fixed by the company.

POLYGLOT PRINTING CO., Ltd.

Registered with a capital of £2,000, in £1 shares, object, to adopt an agreement with E. A. Scheidegger, and to carry on the business of printers, English and foreign manufacturing, law copying and general stationers, typefounders, stereotypers, electrotypers, engravers, designers, bookbinders, booksellers, publishers, typewriters, etc. No initial public issue. The first directors (to number not less than two nor more than seven) are E. A. Scheidegger, P. F. Bochringer, and others to be adopted by the signatories. Qualification (except first directors), 100 shares. Remuneration according to profits.

NORTH HANTS PRINTING and PUBLISHING CO., Ltd.

Registered with a capital of £2,000, in £1 shares, to take over an agreement entered into by H. Blacknell, to acquire the business carried on by J. Morgan, at Fleet-road, Fleet, Hants, as the Fleet Steam Printing Works, and to carry on the business of printers, publishers, lithographers, newspaper proprietors, wholesale stationers, etc. Minimum cash subscription, 10 per cent. of the shares offered to the public. Registered without articles of association. The first directors are H. Blacknell, E. J. Cane, J. Oakley, A. W. Parsons, F. Y. Spear, H. Williams, and W. Kimber.

R. P. WATSON'S WEEKLY, Ltd.

Registered with a capital of £2,000, in £1 shares, to carry on the business of newspaper proprietors, printers, publishers, typefounders, booksellers, stationers, advertising agents, etc. No initial public issue. The directors are to number not more than three; R. P. Watson is the sole governing director, provided that while Elizabeth E. Smith holds 300 shares she may appoint an additional director.

F. W. S. CLARKE and CO., Ltd.

Registered with a capital of £5,000, in £1 shares, to acquire the business and undertaking of F. W. S. Clarke, Ltd. (in liquidation), with all the assets thereof recently purchased by J. G. W. Boulton, H. A. Clarke, and F. W. S. Clarke, and to carry on the business of proprietors, printers and publishers of newspapers, journals, magazines, books, and other literary works and undertakings, etc. No initial public issue. The first directors (to number not less than three nor more than five) are J. G. W. Boulton, F. W. S. Clarke, and H. A. Clarke (managing director). Qualification, 250 shares. Remuneration as fixed by the company.

CARTER AUTOMATIC SHEET-FEEDER SYNDICATE, Ltd.

Registered with a capital of £25,000, in £1 shares, to acquire certain British and foreign patent rights relating to an improved automatic sheet-feeder for printing and folding machines, to adopt an agreement with W. Carter, and to carry on the business of manufacturers of and dealers in such feeders. No initial public issue. The first directors (to number not less than four nor more than six) are to be appointed by the signatories. Qualification £100. Remuneration £100 per annum and 2½ per cent. of the net profits in excess of 10 per cent. divisible.

J. A. DONALDSON, Ltd.

Registered with a capital of £5,000, in £1 shares, to acquire the business carried on by Mrs. S. A. Donaldson, at John-street Printing and Bookbinding Works, Haslingden, as J. A. Donaldson, and to carry on the business of printers, publishers, lithographers, electrotypers, engravers, typefounders, typecutters, bookbinders, booksellers, stationers, papermakers, dealers in ink, paper, and printers' and stationers' sundries, etc. No initial public issue. The first directors (to number not less than three nor more than five) are J. G. Green, G. H. Hindle, J. Barlow, J. J. Hamer and H. Rawsthorne.

BURMAN, COOPER and CO., Ltd.

Registered with a capital of £10,000, in £1 shares, to acquire the business now carried on by J. B. Burman, at Corporation-street and Dalton-street, Birmingham, as Burman, Cooper and Co., together with the periodical known as the *Saddlers, Harness Makers, and Coach Builders' Gazette*, and to carry on the business of newspaper proprietors, journalists, reporters, newspaper agents, newsvendors, advertising agents, and contractors, etc. No initial public issue. The first directors (to number not more than five) are J. B. Burman (permanent governing director and chairman; special qualification, £2,500 shares), T. Burman, and H. Burman.

CHURCH SYNDICATE, Ltd.

Registered with a capital of £2,000, in £2 shares, to carry on the business of proprietors and publishers of newspapers, journals, magazines, books, and other literary works and undertakings, etc. No initial public issue. The first directors (to number not less than two nor more than five) are Dr. J. K. Mustand, Captain F. A. Thatcher, and G. Wedlake.

Digitized by Google

let me say. This is rigged up here to demonstrate that even when the steam is a long distance from its base, when it has to traverse fifty feet of uncovered piping and is being condensed and losing heat all the time, it still has so much heating power superior to that of the water, that under its influence the copper tube expands, the crank is moved, the crook is raised, and should the pump fail the weight is touched, and all the rest of the processes are enacted in quite "House-that-Jack-built" order.

So long as the feed pumps do their work properly there is no sound of the whistle. In Mr. Nutting's works there have been a great many summonses by the automatic signaller, responsive to the expansion of the copper tube. In every case it has been found that the feed pump was for the moment not doing its work.

The Nutting feed serves for large or small boilers and especially well for large batteries of boilers, where the regulation of the water level of each particular boiler, by hand labour, would be no light matter.

Chinese Patents and Trade Marks.

We have received the following communication from Messrs. W. P. Thompsom & Co., Chartered Patent Agents, London and Liverpool:—

SIR,—In the treaty which has just been ratified between the United States and China, there is the following clause which through the most favoured nation clause of the treaty of Tientsin, is equally applicable to Great Britain, the words "Great Britain" being substituted for the United States in the clause:—

> "The United States Government allows subjects of China to patent their inventions in the United States and protects them in the use and ownership of such patents. The Government of China now agrees that it will establish a Patent Office. After this office has been established and especial laws with regard to inventions have been adopted it will thereupon, after the payment of the prescribed fees, issue certificates of protection, valid for a fixed term of years, to citizens of the United States on all their patents issued by the United States in respect of articles the sale of which is lawful in China, which do not infringe on previous inventions of Chinese subjects, in the same manner as patents are to be issued to subjects of China."

An enquiry has been made by His Majesty's Minister at Pekin whether the Chinese Government have taken any steps to establish a Patent Office as provided in Article 10 of the American treaty, but the reply has not yet been obtained.

Hitherto China has been dead against patents of all kinds, and the history of China and Japan are remarkable instances of the advantages and disadvantages of a patent law. In China and in Japan, until a patent law was established, invention stopped at the point where it was no longer profitable to an individual to invent, as he could not keep the matter secret. In matters of manufacture, the Chinese and Japanese recipes for compositions had nearly reached perfection, but anything which could not be worked without the public being able to at once copy, was not invented. Japan passed a very liberal patent law about twenty years ago and its progress since then has been phenomenal—while China equally civilised has stagnated. The present Chinese Government, however, are now convinced that they must go in for modern improvements, hence this patent law.

In the British treaty with China, signed at Shanghai, September 5th, 1902, is the following article in regard to Trade Marks:—

> "Inasmuch as the British Government afford protection to Chinese trade marks against infringement, imitation, or colourable imitation by British subjects, the Chinese Government undertake to afford protection to British trade marks against infringement, imitation, or colourable imitation by Chinese subjects.
>
> "The Chinese Government further undertake that the Superintendents of Northern and of Southern Trade shall establish offices within their respective jurisdictions under control of the Imperial Maritime Customs where foreign trade marks may be registered on payment of a reasonable fee."

Substantially this article has been reproduced in the United States treaty. Through the kindness of the Marquis of Lansdowne we have received the following information:—"A working scheme for patent and trade mark protection is now being evolved, and in the meantime a provisional registration office for trade marks has been established at the Custom House at Shanghai, where we have a registration agent and the Chinese Courts will presumably afford, as they have done in the past, substantial protection against counterfeiting trade marks on the part of Chinese subjects. The French, Italian, German and English representatives have mutually arranged for the punishment in the Consular Courts of France, Germany, Italy and England, of subjects of these countries who infringe registered trade marks, and in all probability the remaining Western nations will shortly do likewise."

DO YOU want to sell or buy machinery? Advertise in the widely-read *World's Paper Trade Review.*

Digitized by Google

Bear in Mind

That money may be wasted in advertising as easily as in any other way. Success depends upon the selection of proper mediums. The best is a well established and influential paper.

☛ A PROPER MEDIUM IS

The World's Paper Trade Review,

which was established in 1879, and is the oldest weekly paper trade journal published in the United Kingdom.

WHAT THEY SAY ABOUT IT.

TESTIMONY OF ADVERTISERS:—

"It may interest you to know that our advertisement in your paper is bringing us a lot of orders for samples."—H. C. STANDAGE & Co., Birmingham.

"We have secured already several orders through the medium of your valued paper."—WOLF & Co., Water Lane, London.

"A journal in which we have great confidence . . . well aware of its circulation and ability."—The Grove Chemical Co., Limited.

"A widely circulating trade journal."—HARRY B. WOOD, Manchester.

APPRECIATION OF READERS:—

"We have for many years been, and still are, subscribers to your journal, which we are always reading with a great deal of interest, and which we consider to be one of the best journals of its kind in Europe.—BAMBLE AKTIE CELLULOSE FABRIK, Herre pr. Porsgrund, Norway.

"I take this opportunity to speak out that your journal has no equal of its kind in all countries."—M. BEHREND, Prince Bismarck's Paper Mills, Varzin, Germany.

"I appreciate the value of your journal, and find it of considerable benefit in my business."—H. A. Craigie, of S. D. Warren and Co., Cumberland Paper Mill, Me., U.S.A.

" . . . widely circulated, both in this country and abroad."—Munns and Longden, Solicitors to the British Wood Pulp Association.

"We take great interest in the *Review*, reading it carefully every issue, and you may be sure that its excellence is appreciated in this direction."—Perkins, Goodwin and Co., Paper Stock Merchants, New York.

"The best paper trade journal in the world."—W. H. WILES, Milton Paper Mills, Bowling.

OPINIONS OF CONTEMPORARIES:—

"A widely informed and well managed enterprise, of great value to exporters for its exact Market Reports and statistics of raw material."—*Central-Blatt fur die Deutsche Papier-Fabrikation*, Dresden.

"The leading European exponent of the paper trade."—*American Paper Trade and Wood Pulp News.*

"This weekly journal, published at London, is the most important of those which deal with the paper industry."—(Translation from) *La Papeterie*, Paris, the official organ of the French Wholesale Stationers' Association.

"It is the leading journal identified with the paper industry in England. . . . . Well and intelligently conducted."—*The Paper Trade*, Chicago.

"The completeness of its Market Reports has made it indispensable to the Paper and Paper Stock Trades, and its dependability is recognised throughout Europe and America."—*The Printers' Register* London.

Is your firm's Advertisement now appearing in this well-known trade Journal?

If Not, Why Not?

Please Note. The World's Paper Trade Review is subscribed for not only by Paper Makers, and the Home, Foreign, and American Paper Stock and Mill furnishing Trades, but by the Managers and Workmen in Paper Mills, for whom a cheap edition is published; and the advertisement tariff includes insertion in both editions.

☛ The *Review* is undoubtedly the best medium for all classes of advertisements relating to the paper, paper stock, engineering, and allied trades. Rates on application to the publishers, W. JOHN STONHILL & Co., 58, Shoe Lane, London, E.C.

Subscription £1 per Annum (post free) to all countries.

Digitized by Google

[redacted]

[redacted]

[redacted]

THE PAPERMAKERS' OPPORTUNITY!

Much has been said and written concerning the stationary condition of the Exports of British Paper. There are houses ready to do a larger export trade, and to secure increased orders no opportunity should be lost by Papermakers and Wholesale Stationers in bringing their names and specialties before

COLONIAL & FOREIGN BUYERS.

To do this effectively, no better medium presents itself than the "British and Colonial Printer and Stationer," Established in 1878. Its contents are keenly studied by Foreign and Colonial purchasers of Paper, Stationery, &c., and firms advertising in its pages may rely upon securing

GOOD BUSINESS.

From Sydney, N.S.W., Wm. Brooks, Printer and Stationer, writes:—"I read your paper with a great deal of interest, and there is no doubt that it is a paper which should be taken by every printer who wishes to keep himself in touch with developments in our line.

H. S. Cropper and Co., Nottingham, says:—"As a medium for advertising it is second to none."

THE LEADING JOURNAL.

Published EVERY THURSDAY.

Paper-makers, Wholesale Stationers, &c.

DESIROUS OF INCREASING THEIR HOME TRADE,
AND EXTENDING THEIR BUSINESS WITH . .

AUSTRALIA, NEW ZEALAND, INDIA, AFRICA, CANADA, &c.

SHOULD BOOK SPACE WITHOUT DELAY.

NEXT EXPORT ISSUE—including "BUYERS' GUIDE"—JUNE 23.

ADVERTISEMENT RATES on Application to

W. JOHN STONHILL & Co., 58, SHOE LANE, LONDON, E.C.

SUBSCRIPTION:

United Kingdom, 10s.; Colonial and Foreign, 12s. per Annum Post Free.

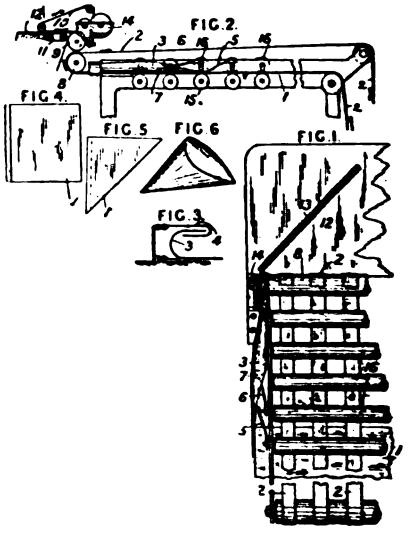
Digitized by Google

KELLY'S DIRECTORY OF STATIONERS, PRINTERS, BOOKSELLERS, PUBLISHERS, PAPERMAKERS, ETC., 1904. Imp. 8vo. xxxii + 1,306 + 64. Cloth, 25s. Kelly's Directories, Ltd., 182-3-4, High Holborn, W.C.

No more valuable or more indispensable book of reference for the office library of a business having any connection with the various trades enumerated in the above title could be named than this excellent publication of Kelly's. The new edition just published is the ninth, the first having been published in 1872. The directory embraces the various industries connected with the printing, stationery, and allied trades in England, Scotland and Wales, and the principal towns in Ireland, the Channel Islands, and Isle of Man. There are close upon 8,000 more names than in the last edition, a fact which, even allowing for the increase incidental to the larger population, may be taken to indicate a satisfactory condition of the trades. The figures give some idea of the importance of the trades connected with printing and publishing; but as the names in the present volume represent only manufacturers or those actually in business, they comprise but a small proportion of the number to whom literature in some form actually offers employment. The work embraces the names of those in every department of the trades, from the rag merchant, the pulp importer, and the manufacturer of the chemicals used in papermaking, and of the publishers of the various books, periodicals, newspapers, etc., as well as the makers of the fancy articles dealt in so extensively by all stationers throughout the country. Following the suggestions of subscribers, the publishers of the Directory have included in the present edition the names in the principal towns in the Channel Islands and the Isle of Man, which will prove a valuable addition to the work. The same care in compilation and in the final presswork that has distinguished former editions, and has earned for them a commendable reputation for reliability, has been expended on the present edition, and many new trades have been introduced. "Every name contained in the work," says the editor in his preface (which by the way includes some interesting statistics of imports and exports in the trades concerned), "has been verified, either by a personal call or by one of our agents, or by a communication through the post," and the result is a work of great and everyday usefulness. In addition to the alphabetical arrangement of the places under the various counties of England and the principal towns of Ireland, the Channel Islands, and Isle of Man, as well as the classification of trades respectively for London and suburbs, the country and Ireland, there are serviceable indices to towns and places, to trades, and to names of advertisers, and to the advertisements themselves, according to trade, all of which greatly facilitates the ease and quickness with which reference may be made to anything and everything contained in the volume.

Paper Bags.

In making bags of conical shape, such as that shown in Fig. 6, the paper blank 1 is carried between bands 2, so that it projects at the left-hand side into a curved or spiral folding device 3, by which the edge is folded, as shown in Fig. 4. To facilitate the folding of the edge, it is pressed against the folding channel by a spring lever 5, and it is further guided and pressed by a spring lever 6 terminating in a ball 7. At the end of a folding device, the folding edge is guided by a



flange 4, Fig. 3, to rollers 8, 9, between which the blank passes, and the upper side of the folded edge is pasted by a pasting device 14. Thence the blank is carried by bands 10, 11 along a table 12 having a slit 13, through which the blank is passed, so as to fold it, as shown in Fig. 5, rollers underneath the slit serving to attach the edges together. To ensure that the blank will not shift while being operated upon, the carrying bands 2 move between rollers 15, 16, the rollers 16 pressing by their weight on the bands. The patent is in the name of Gebrüder Tellschow.

Digitized by Google

The World's Paper Trade Review

A WEEKLY JOURNAL FOR PAPER MAKERS & ENGINEERS.

[Registered at the General Post Office as a Newspaer for Transmission in the United Kingdom.]

TWENTY-FIFTH YEAR.

VOLUME XLII. NUMBER 26. | LONDON: JUNE 24, 1904. | PRICE SIXPENCE. EVERY FRIDAY.

Andrews & Co., Ltd.,

91, QUEEN VICTORIA STREET, LONDON,

And at MANCHESTER.

Telegrams:—"ARBORARIUS," London. Telephone:—835, Bank.

WOOD PULP AGENTS.

MAGO Finest Grade Moist Mechanicals, Hot and Cold Ground.

TOFTE Easy Bleaching Sulphite. (Except in Scotland).

TILSIT Extra Strong German Mitscherlich Sulphite.

BÖHNSDALEN Sulphites, Strong News and Easy-Bleaching.

HAFSLUND SULFITFABRIK, Easy-Bleaching Sulphite.

WERMBOHLS FABRIKS AKTIEBOLAG, Easy-Bleaching and Strong Soda Pulps. (Except in Scotland).

GLOMMENS TRAESLIBERI, Hot-Ground and Extra Strong Moist Mechanical Pulp.

SIDEROSTHEN Anti-Corrosive Paint.

Digitized by Google

A. WERTHEIM & Co.,

HAMBURG,

SUPPLY ALL KINDS OF

Sulphite,

Soda and

Mechanical

WOOD PULPS.

OFFICES AT:

CHRISTIANIA (Norway)	Kirkegaden No. 20.
GOTHENBURG (Sweden)	Lilla Kyrkogatan No. 2.
MANCHESTER	Guardian Buildings (opposite Exchange).
LONDON	77a, Queen Victoria Street, E.C.
PARIS	Rue de Londres No. 29.
LYONS	54, Cours Gambetta.
MILAN	24, Via Solferino.
TOLOSA (Spain)	18, Calle San Francisco.
ST. PETERSBURG	Kleine Podjatscheskaja, No. 4, Qu. 16.
NEW YORK	99, Nassau Street.

Telegraphic Address:

"WERTHEIMO, HAMBURG."

Digitized by Google

The World's Paper Trade Review
A WEEKLY JOURNAL FOR PAPER MAKERS & ENGINEERS.

[Registered at the General Post Office as a Newspaper for Transmission in the United Kingdom.]

TWENTY-FIFTH YEAR.

VOLUME XLII.
NUMBER 22.

LONDON: MAY 27, 1904.

PRICE SIXPENCE.
EVERY FRIDAY.

MATTERS of INTEREST

A Survey of Trade Subjects Engaging Attention at Home and Abroad.

INFORMATION OF TECHNICAL AND PRACTICAL VALUE.

Conducted by

Dr. HENRY P. STEVENS, M.A., Ph.D., F.I.C.

RUST SPOTS ON CALENDER ROLLS.

CALENDER rolls are a constant source of worry to the papermaker, in particular the rust spots that make their appearance on new rolls. The greater the care taken to polish them up on every opportunity, the longer the trouble seems to last. After each attempt to remove them they appear again more pronounced than ever. How is it that rust spots do not form on rolls which have been some time in use? Simply because while in use they have become covered with a thin layer of adherent oxide which is permanent and preserves the iron from further action. A writer in the *Wochenblatt* gives a recipe for artificially coating the rolls with this thin permanent rust film. In the mills, the new bright metal surface is often smeared with tallow, this must be removed and the rolls put in a moist place so supported that the metal surface is wholly free. After a few days the thin rust layer which has formed is rubbed well in all over the surface with a moist cloth. This operation is repeated three or four times and completed by rubbing over with petroleum to remove dirt and dust particles. The rolls are now ready, and can be used straight away without causing further trouble. The operations may be hastened by using weak vinegar (one part of vinegar and three of water), and wiping with a cloth dipped in the liquid. The rust layer then forms in a few hours and the operation can be repeated three or four times. In the course of a day a sufficiently thick layer of oxide has accumulated.

NEW ANILINE COLOURS.

AN aniline colour frequently employed for paper is the diamond fuchsin or diamond green. Unfortunately it dissolves, it is said, with difficulty in cold water. On this account it has been replaced by the powder fuchsin, which dissolves readily in cold water. This, however, is not without its disadvantages, it raises a great deal of dust when handled, and there seems some difficulty in getting it into complete solution in water, small particles remaining undissolved and being deposited in the substance to be dyed. The Badische Aniline and Soda Manufactory have brought out another dye, an acetic fuchsin, for which it is claimed that it is free from the above drawbacks; care only is required in dissolving it to see that the solution is kept well stirred, as it is said to have a tendency to cake at the bottom of the vessel. The firm of Leopold Cassella and Co. have introduced a new yellow dye, Diamine fast yellow A.R to replace the Metanil yellow. This latte

Digitized by Google

it is contended, in spite of its bright colour, has certain disadvantages, such as extreme susceptibility to the action of acids, and a tendency to redden on the drying cylinder. It is further stated that it is not easily fixed if the paper be a highly sized one. The new colour has a clear, reddish yellow shade, and is said to be far and away more permanent than the Metanil yellow, to have a great affinity for vegetable fibres, to be difficultly susceptible to acids, so that lower grades of sulphate of alumina can be used in sizing without affecting the shade; and whereas the Metanil yellow reddens with a relatively small change of temperature, the new colour is not affected even if the drying cylinders be over-heated. Metanil yellow is considered a comparatively fast dye, but the new colour is said to far exceed it in this respect. A comparative test showed that the new colour for a long period stood the action of light well, while the Metanil yellow in a few days turned grey, and then completely faded. Many other advantages are claimed for this new colour, and it is especially recommended for dyeing chemical pulp and rag papers. It can also be used for papers containing mechanical pulp, although the intensity of the colouring is somewhat less.

*** *Under the heading of* "MATTERS OF INTEREST," *attention will be given to technical and practical questions submitted by students attending paper-making classes and subscribers generally. Correspondents must give their names and addresses, not necessarily for publication, but as a guarantee of good faith.*

French-Hickman Flax Fibre Co., Ltd.

The ordinary general meeting of the French-Hickman Flax Fibre Co., Ltd., was held on Friday at Winchester House, E.C., Mr. Harold Krall presiding.

The CHAIRMAN said that when he was in America on his first visit after the formation of the By-Products Paper Co., he found that there had been great delay in the delivery of the machinery, owing to strikes in the engineering trade, but when he left, in December, the mill had just started and was producing flax pulp, and he was assured that that company had ample working capital. In February of the present year, however, a cable was received stating that the working capital of the By-Products Co. was exhausted, and that the business would go into the receiver's hands. He, therefore, went back to America, and found that the position of things was chaotic. On his representation it was agreed to postpone the shutting down of the Dakota mill, and after negotiations it was arranged that Mr. Davidson and other bondholders should lend sufficient to pay off the By-Products' debts, and that the company should lend sufficient money to maintain the Niagara mill in good order. He thought that the present position was better than if a receiver had been appointed, and that the company would not be called upon to supply any more money for its American interest. Regarding the English side of the business, in July last the Flax Pulp Co. was formed, and the company's holding was about 70,000 shares. The Flax Pulp Co. had acquired a mill in Hampshire, and the plant was now working. A site for the main works had been obtained near Liverpool, and it was expected that the works would be started in June.

A SHAREHOLDER asked how the company (the French-Hickman) was being financed.

The CHAIRMAN said that the directors had advanced money to the company.

The report was adopted.

Foreign Unprinted Paper.

Countries Supplying the British Market.

Nearly 67 per cent. of the total value (£4,850,183) of the imports of foreign paper and boards into the United Kingdom last year was on account of unprinted paper, amounting to 4,117,207 cwts. of the value of £3,241,534. The official classification shows the receipts "on reels" and "not on reels," as under, from the countries mentioned:—

ON REELS.

From—	Cwts.	Value.
Russia	342	£103
Sweden	472,116	310,692
Norway	281,660	178,571
Denmark	7,072	5,686
Germany	94,250	67,291
Holland	68,465	55,767
Belgium	8,951	8,777
France	5,648	7,839
Italy	158	284
Austria-Hungary	630	376
United States of America	257,956	143,997
Canada	115,959	57,801
TOTAL	1,313,847	£837,284

NOT ON REELS.

From	Cwts.	Value.
Russia	154,917	£96,206
Sweden	742,161	519,671
Norway	562,883	377,516
Denmark	29,795	21,482
Germany	337,886	335,900
Holland	529,544	460,990
Belgium	259,149	265,989
France	42,966	149,019
Italy	7,783	12,781
Austria-Hungary	19,906	16,422
Japan	3,295	15,118
United States of America	105,746	119,263
Other Foreign Countries	944	1,389
Canada	5,898	2,825
Other British Possessions	307	637
TOTAL	2,803,360	£2,404,250

Digitized by Google

Re Physical Tests on Blotting Papers.

To the Editor of the WORLD'S PAPER TRADE REVIEW.

SIR,—Referring to the interesting article by Dr. H. P. Stevens in your issue of the 13th inst., I have carefully digested the matter, but cannot follow all the writer's results and deductions. There seems to be several—probably printer's—errors and the tables of figures do not follow the order of reference mentioned in the text.

I should be glad if the writer will kindly explain the following obscure points:—

Referring to Series A: head or top of Column 3,

5 T = thickness of 5 discs in mm. = *half* vol. in c.c.

(1) How is the *half* vol. arrived at when any number of discs measured in mm. equals volume in c.c.?

(2) The percentage of ashes for papers Nos. 3, 6, and 12 should be, respectively, 10 per cent., 11·3 per cent., 0·27 per cent.

(3) The above alters the columns 7, 8, 9, 10, 11, and 20 for Nos. 3, 6, and 12 papers.

It is stated in the last sentence (left-hand) of page 3 that "it only remains to tabulate the papers in the order of values of the figures given in Column *11* to appreciate," etc.

Mr. Stevens appears, however, to have tabulated them rightly for bulk, from Column 20 (Series A).

In the second paragraph, page 3, right-hand, it is stated in the second sentence that the *last* tables show a *Summary* in which the mean values are given. The *last* tables are, however, Series C.

Regarding results given in Summary C (blot results), Columns 6 and 7, these figures are not arranged apparently so that the smallest figure represents the best paper, as mentioned in text of article. The columns of means, Nos. 5 and 8 in Summary, are also unintelligible to the writer.

It is interesting to note that the substance of the papers tested calculated from Columns 3 and 4, Series A, varies from 27 lbs. double crown for No. 9 to 63 lbs. for No. 11.

If an additional column was put in Series A giving the substance of all the papers tested, it would enable other readers to readily follow the interesting and valuable calculations. It would also facilitate reference if Series B and C were headed Strips and Blots respectively.

Yours truly,

A.T.

Lancs., May 24, 1904.

———o———

Paper Imports and Exports.

To the Editor of the WORLD'S PAPER TRADE REVIEW.

SIR,—The valuable statistical information presented in the columns of your last issue should merit the careful study of papermakers, and also of mill workers.

According to the import returns, the total value last year was £4,850,183, and the sum that actually went to the foreign manufacturer was £4,748,557. What did the foreigner buy of the British papermaker, only £631,001 worth of paper, etc., out of a total exportation of £1,795,850. The re-export figures are of no great importance.

Surely the most rabid Free Trader will admit that there is something radically wrong! The paper received is of a quality that could largely be made in this country, thus leading to an expansion of the paper manufacturing industry and affording employment to many extra hands.

It puzzles me extremely to find that manufacturers who are apparently hard hit by foreign competition simply give a shrug of their shoulders and quietly ignore the loss of a sum of between four and five million pounds sterling annually to the British papermaking industry.

Yours truly,

A.W.

Manchester, May 25, 1904.

———o———

Suggestion Boxes in Paper Mills.

To the Editor of the WORLD'S PAPER TRADE REVIEW.

SIR,—It is encouraging to find that the introduction of suggestion boxes in paper mills is bearing good fruit. The idea was, I believe, warmly supported by the Papermakers' Association when discussed at one of their meetings. The suggestion boxes were introduced, as stated at the time in a note in your paper, at the mills of Messrs. Edward Lloyd, Ltd., Sittingbourne, and already some of the workers have received monetary awards.

The fact cannot be emphasised too much that by means of suggestion boxes in a mill the gulf hitherto existing between the top and the bottom of the trade has been bridged over. Hitherto employees who happened to light upon an idea for the improvement of the special plant they worked, seldom troubled to convey any suggestion to the heads of the firm, because they were either snubbed or robbed of the fruits of their labour by some intermediate person—as a rule it was the machinist who snubbed, and the boss papermaker who robbed—my experience, at least, proves this.

The use of a suggestion box in mills is no new thing in America, for long ago in that country the owners or agents took matters in their own hands, and by interrogation solicited information from the workpeople. If ideas of value were forthcoming, a reward was generally given in the shape of a rise in wages.

It is to be hoped that the idea will greatly spread in this country as the object is a worthy one, and at least a trial will cost nothing. To invite suggestions from workers is undoubtedly a step in the right direction.

Yours truly,

AN OLD PAPER MILL WORKER.

Maidstone, May 21, 1904.

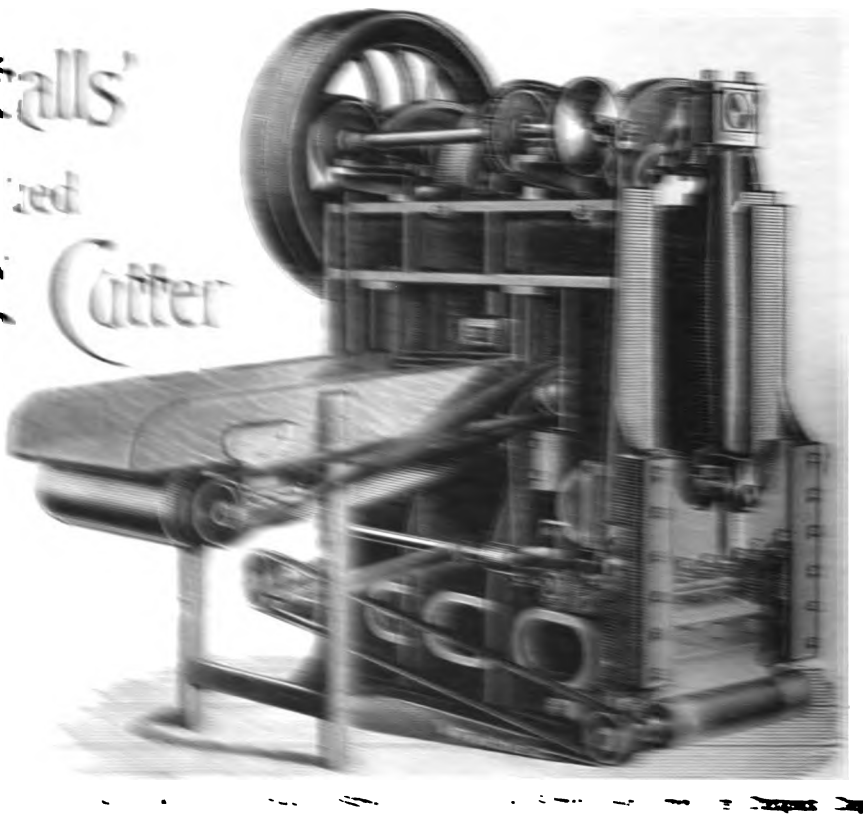
Digitized by Google

BENTLEY

Papermaker

BURY, nea

Nuttalls' Improved Rag Cutter



[illegible] Capacity [illegible]

[illegible] of th

[illegible] EQUIPPED PAP

[illegible] PARTICULA

Digitized by Google

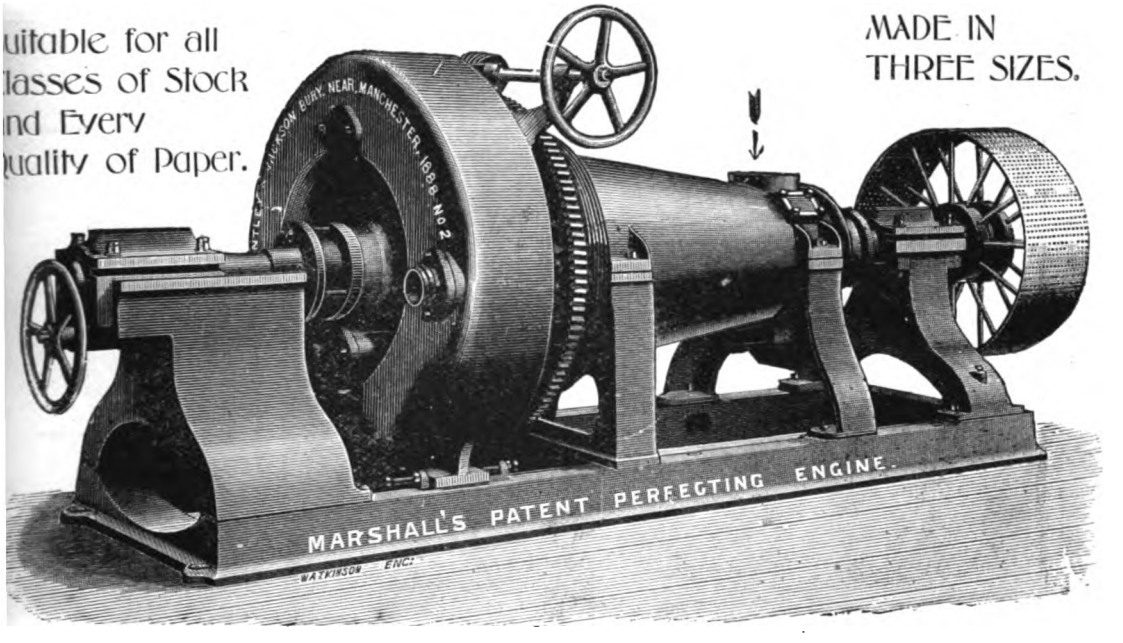
JACKSON
LIMITED.

Engineers,
MANCHESTER.

Marshall's PATENT Perfecting Engine

Suitable for all Classes of Stock and Every Quality of Paper.

MADE IN THREE SIZES.



This Engine will produce a Better Finished, Stronger, and More Even Sheet of Paper from the same Materials than can be produced by any other Mechanical Process, and at the same time will REDUCE the TIME and POWER Required for Beating.

COBURN-TAYLOR Machine.

ILL SHOULD BE WITHOUT.

ON APPLICATION.

Digitized by Google

Drying Paper Webs.

An English patent has been granted to the Dresdner Chromo und Kunstdruk-Papierfabrik Krause and Baumann, of Dresden, for an "improved process and apparatus for drying paper webs."

It is pointed out that for the purpose of drying paper webs which are coloured on both sides, the paper web is caused to travel in an upward and preferably vertical direction. In this upward travel of the paper web, even through only a short distance, it is impossible to obviate the formation of creases, especially in the case of thin paper. Such formation of creases must absolutely be obviated, and furthermore the drying process is very slow.

The present invention has for its object to provide means for effecting a rapid drying without creasing of the paper web, whilst also obviating the transference of moisture or colour or the like to those parts which receive the web and convey it further on. Hot air currents under high pressure are caused to impinge in the direction of the upward movement of the web against both sides of the same. These hot air currents dry the paper web sufficiently to enable it to travel vertically without the formation of creases in a greater length than could be obtained hitherto with vertical travel of the web.

Fig. 1 is a vertical section of the apparatus on the line A—B of Fig. 2, and Fig. 2 is a horizontal section on the line C—D of Fig. 1.

The paper web *a* to be dried is caused to travel upwards between two boxes or chambers *b*, *b* arranged on both sides of the path of the web. The walls of the boxes facing the web are provided with slots or slits *c* which are inclined upwards towards the respective side of the web. The hot air is supplied to each box from a common main supply pipe *d* through a separate branch pipe *e* which delivers the hot air through a pair of side pipes *f*, *f* into the lower part of each box *b*, each pair of side pipes, *f*, *f* entering the outer side or wall of its respective box in such a manner that the hot air admitted is distributed as uniformly as possible over the entire width of each box so as to pass out through all the slots *e* in a uniform manner. The action of the numerous jets or currents of hot air by impinging against both sides of the upwardly moving web is an intensive and multiple one. First, these currents of air produce a very considerable drying effect on both sides of the paper web so that no moisture is transferred to the travelling or endless felt *g*, which receives the dried web and conveys it further on. The hot air currents issuing under uniformly high pressure in an upward direction from the slots *c*, *c* in the walls of the boxes (each slot in each wall having a corresponding slot situated opposite to it in precisely the same horizontal plane in the other wall) impinge in an upward direction against the sides or surfaces of the web *a*, and thus assist in a considerable degree in effecting the upward travel of the paper web, whereby the conveying device situated above the boxes is relieved, and especially the upward pull on the web is prevented from causing the formation of longitudinal creases. The hot air currents after acting on the web pass out at the uppermost part of the drying apparatus. The action of the hot air currents moving upwards the paper web may be materially increased by exhausting the hot air at the

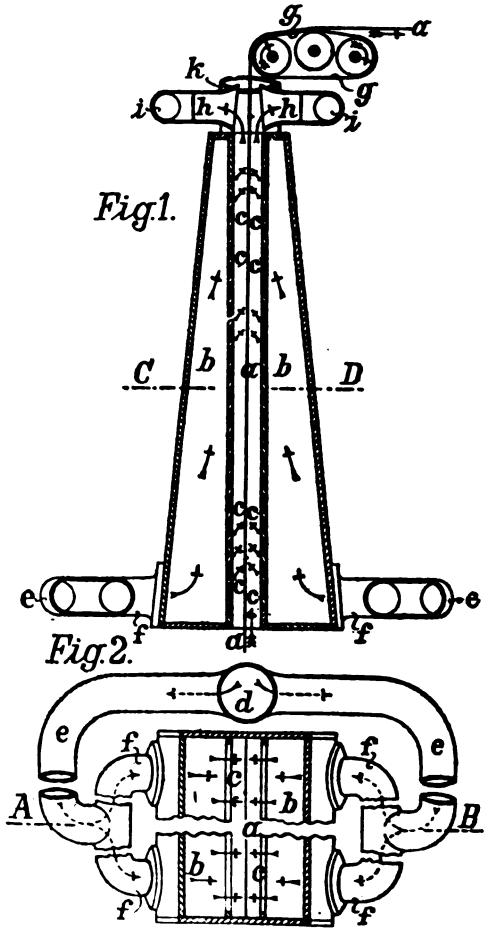


Fig. 1.

Fig. 2.

upper end of the vertical drying shaft formed by the adjacent walls of the boxes *b*, *b*. As such currents still contain much heat, their direct escape into the atmosphere would entail a considerable loss of heat. For this purpose an arrangement of pipes *h*, *h* similar to that provided at the lower part of the apparatus for the admission of hot air is provided at the upper part of the said apparatus for the purpose of exhausting the air which is still hot. This exhausting causes a considerable acceleration of the circulation of hot air. For this purpose the exhaust pipes *h*, *h* are situated on both sides of the paper web, and are preferably provided with trumpet-like openings. These exhaust pipes

Digitized by Google

are connected to pipes *i*, *i* which are in connection with a common main exhaust pipe *k*. This main exhaust pipe *k* may be connected to the main admission or supply pipe *d*, in which case a fan or blower (not shown) and a heating apparatus (not shown) may be inserted between the two pipes *d* and *k* for the purpose of forcing or drawing the hot air exhausted from the upper part of the apparatus by means of the fan or blower throught the heating apparatus so as to heat the said air again before it is admitted again to the drying boxes *b*, *b*.

Broom for Paper Pulp.

The efforts that have been made hitherto to utilise the fibres of the broom for the preparation of paper pulp have not succeeded on account of technical or economic obstacles, says *La Revue des Produits Chimiques*. On the contrary good results have been attained by employing the entire branches or roots of the shrub.

M. Scopinich operates in this way: The branches, twigs or roots are cut up and placed in a cold alkaline bath, for example, one of caustic soda of 10 degs. Baumé, or else a bath formed of the carbonate of soda mingled with milk of lime, or a bath of potash or other alkaline substances, in suitable proportions for producing an effect equal to that of caustic soda of 10 degs. B. Three or four days after the immersion the contents, disintegrated by the action of the alkali, are taken from the solution, pressed, washed carefully, and put in a bath of water containing chloride of lime in proportion of 1 or 2 per cent. They are left in the water for two or three hours, until they become sufficiently friable. Then they are removed and introduced into another washing bath, containing a small quantity of sulphuric acid or sodium hyposulphite.

After these two operations are completed the material is ground in a suitable apparatus for a time sufficient to secure a pulp of the desired fineness.

The alkaline liquid of the bath of caustic soda or other alkalies not only retains all the chlorophyl but also dissolves the gums and resins, of which a part is saponified, and a part set at liberty. By adding fats or oils the liquid of the bath may serve for the production of a compact soap of good quality.

SWITZERLAND imported paper and paper goods last year to the value of £427,100, an increase of £62,300 compared with the year 1902.

CELLULOSE pulp and cut wood for wood pulp were imported into Rouen last year to the extent of 70,246 tons, an increase of 13,817 tons compared with the previous year. Cellulose pulp is received from North Sea ports, and roudins (small cut wood for wood pulp purposes) come from the same ports and form the greater proportion of the importation.

J. M. VOITH,

Papermakers' Engineer & Turbine Builder

HEIDENHEIM - on - BRENZ.

Every Description of Machinery

FOR PAPER AND PULP MILLS.

SPECIALITIES:

Paper Machines.
Board Machines.
Calenders.
Bischof's Reelers.
Angle Cutters.
Rag & Rope Engines.
Beating Engines.
Basalt Lava Beater Rolls.
Dr. Wurster's Pulping Engines.
Large Four-sided Cutters, with Mechanical Feed.
Nacke Refining Engines.
Strainers & Knotters.
Hydraulic Presses.
Packing Presses.
Stuff Pumps and Water Pumps.

TURBINES suitable for all Falls and Quantities of Water.
TURBINE GOVERNORS of utmost Precision.
1,502 TURBINES, with 244,882 h.p., in use and on order.

Sole Agents for the United Kingdom and Colonies:—

J. MARX & Co., 133—139, Finsbury Pavement, E.C.

Digitized by Google

British Demand for American Paper.

The following figures show the imports of American paper into Great Britain during the five years, 1899-1903:—

	TOTALS.	
1903	497,775 cwts.	£359,897
1902	518,714 ,,	409,155
1901	719,313 ,,	517,070
1900	577,866 ,,	422,813
1899	592,501 ,,	405,905
Official classification:—		
	UNPRINTED.	
1903	363,702 cwts.	£263,200
1902	315,773 ,,	248,808
1901	505,868 ,,	369,603
1900	430,414 ,,	313,323
1889	396,152 ,,	291,294
	PRINTED OR COATED.	
1903	15,811 cwts.	£35,596
1902	23,542 ,,	58,900
1901	26,347 ,,	60,019
1900	21,091 ,,	52,205
1899	15,684 ,,	36,887
	STRAWBOARDS AND MILLBOARDS.	
1903	51,350 cwts.	£27,244
1902	87,115 ,,	42,151
1901	80,162 ,,	35,232
1900	82,747 ,,	33,485
1899	139,613 ,,	57,692
	WOOD PULP BOARDS.	
1903	66,912 cwts.	£33,767
1902	122,284 ,,	59,205
1901	106,936 ,,	51,516
1900	43,584 ,,	23,800
1899	41,052 ,,	20,032

The Esparto Trade.

Messrs. Ide and Christie, in their June circular report as follows:—The heavy imports of the past month have gone some way towards replenishing consumers' stocks and removing any pressing apprehension of running short, which for a time possessed the minds and influenced the operations of buyers in securing cargoes at advanced prices. The receipts for the five months compare favourably with those in the same period of the past two years, but the statistics for twelve months are still much below last year, although almost equal to 1902. A fairly abundant supply of tonnage has assisted shippers materially in moving cargoes homeward in fulfilment of contracts, and while these have depleted stocks abroad, the high prices current in the producing countries may have the tendency to stimulate supplies as soon as the summer growths are available. The enquiry for distant contracts meantime has somewhat slackened in the home market through the firm tone maintained by sellers, who for the present are unable to abate their quotations for any position.

Spanish alone of the four descriptions of esparto has been a small arrival, and the five months' receipts have only reached 18,334 tons, against 22,378 tons last year and a similar quantity in 1902. A very considerable business in distant shipment was carried through in the latter half of May, and although buyers showed considerable reluctance in conceding sellers' prices in the end they were constrained to do so in order to cover their wants over the autumn and winter. Prices remain firm, but the demand has to some extent been satisfied.

Algerian has been received abundantly during the past month and the total of this year has been brought up to 35,298 tons against 28,047 tons. The imports have been pretty widely distributed so that consumers in all districts have received supplies on contracts, to the relief of any anxiety that previously prevailed. Quotations are unaltered from last month, but for new crop shipments there is a disposition to defer operating at present prices and the enquiry is limited. The prospects of the new crop are said to be favourable, but gathering may be somewhat delayed owing to the labour requirements of the cereal harvest which also promises well.

Tunisian has likewise been a full arrival in May but the five months, although equal to those of 1902, are less than those last year by 4,600 tons, the comparative figures being 13,536 and 18,179 tons respectively. A certain amount of business for prompt and comparatively early shipments has been carried through and for these positions full prices have been paid. There is little enquiry at the moment for distant delivery but quotations are steady.

Tripoli has also been a large import, and the five months' figures, 19,388 tons, are 4,000 tons over those of last year. The high prices ruling in the local markets of Tripoli seem to have told in the end since the receipts at the ports this year continued considerably beyond their usual time. There has been a restricted demand in the home market, but quotations are firm and sellers do not press for orders.

The following is an official summary of esparto arrivals at all U.K. ports during past month:—

London	1,938 tons	Liverpool ...	2,149 tons
Fleetwood ...	1,440 ,,	Glasgow	815 ,,
Aberdeen ...	761 ,,	Dundee	2,632 ,,
Kirkcaldy ...	772 ,,	Grangemouth ...	1,659 ,,
Burness	730 ,,	Granton	4,670 ,,
Leith	465 ,,	Sunderland ...	4,732 ,,

Making a total of 21,763 tons, to which Spain contributed 2,880 tons; Algeria, 8,075 tons; Tunis, 4,320 tons; and Tripoli, 5,888 tons.

PORTO RICO received paper and manufactures from the United States in 1903 to the value of £23,605, compared with £22,702 in the previous year. Paper of United States origin has free entry into Porto Rico, whilst that of other origin is subject to the full McKinley tariff.

A FACT that should have weight with advertisers is the large circulation of the *World's Paper Trade Review* at home and abroad.

Digitized by Google

Papermaking in Spain.

The Annual Meeting of the Papelera Espanola.

At the recent annual meeting of the shareholders of the "Papelera Española" Company, considerable enthusiasm was displayed by the shareholders on account of the satisfactory results obtained. A detailed account was given of the enlargements and important reforms made in the various mills. Depôts have been built in different capitals, and all the branches of papermaking increased with a view to supplying the needs of Spanish consumption by national industry. The mills which worked all the year were those of Aranguren, Renteria, Arrigorringa, Villava y Zaragozana. Their production was 2,238 metric tons more than in 1902.

The profits realised amounted to 1,147,393·69 pesetas or 5·73 per cent. of the share capital. In the previous year, viz., 1902, the profits were 884,581·24 pesetas. The profits were distributed as follows:—

A.—To the reserve fund 200,000 pesetas; in 1902, 179,916·25 pesetas were paid into the fund.

B.—Various payments; expenses of conversion of obligations, etc., 90,000 pesetas.

C.—Payment of the dividend, 800,000 pesetas, viz., 4 per cent. of the share capital.

D.—Stamp duty on shares and dividend distributed, 44,000 pesetas.

E.—Balance of 13,393·69 pesetas brought forward to new account for next year.

There was an exhibition in the rooms of the establishment of various types of fancy papers of Spanish manufacture which were carefully examined and admired by the shareholders.

GAZETTE.

PARTNERSHIPS DISSOLVED.

HARRISON, E. F., and BUTLER, J. N., proprietors of the *Grocer's Gazette and Provision Trades' News*, 15, Philpot-lane, London, E.C.; debts by J. N. Butler. March 31st.

DISTRIBUTION OF ASSETS.

SOMMERVILLE, J. F., late of Bitton, near Bristol, paper manufacturer. Claims by July 9th to G. Bush and Bush, 9, Bridge-street, Bristol, solicitors for the executrix.

THE BANKRUPTCY ACTS, 1887 *to* 1890.

RECEIVING ORDERS.

DAVIS, F., trading as Frederick Davis and Co., 21 and 22, Castle-green, and 55, Castle-street, Bristol, printer and stationer. Date of order, June 10th, made on debtor's own petition. Date of adjudication order, June 15th. First meeting of creditors, June 29th, 11.45 a.m., at the official receiver's offices, Baldwin-street, Bristol. Public examination of debtor, July 1st, noon, at the Guildhall, Bristol.

BISHOP, H. S., 7, Falmouth-road, lately 44, Egerton-road, Bishopston, Bristol, printer. Date of order, June 17th, made on debtor's own petition.

DR. C. WURSTER'S PATENTED **Pulping Engines & Kneaders** NEARLY 80 AT WORK.

LARGE PATTERN—THREE SIZES.

PULPING-UP 3, 6, and 9 TONS of Dry Papers or Pulp in 24 hours.
Power:—5-h.p., 8-h.p., and 12-h.p. Prices:—£125, £150, and £200.

SMALLER PATTERN—For Clean Papers only.

PULPING-UP HALF-A-TON to ONE TON of Dry Paper in 24 hours. 2 to 4-h.p.
Built in Iron, £75, £90, and £100.
For Better Quality Papers, Trough and Propellers made of Brass:—£100, £125, & £150.

Special Machines for Unsorted Paper.

These Machines do not grind, cut up, or wet the fibres, and, as the state of beating and refining is unaltered, neither colour nor sizing being affected, and impurities not touched, "Broke" can be re-used for the same quality of paper again.

For Particulars apply to **Dr. C. WURSTER,** 29, Abbey Road. St. John's Wood. LONDON, N.W.

STRAW PULPS

Stroostoffabriek "Phœnix,"

VEENDAM (Holland).

WHITE, STRONG & CLEAN.

Represented by

H. BERTRAM & Co., LONDON (28, Queen Street).

Digitized by Google

WORLD'S PAPER TRADE REVIEW.
Office: 58, Shoe Lane, E.C.

TRADE NOTES.

IN RE CALLENDER'S PAPER MANUFACTURING CO. (LTD.).—Before Mr. Justice Buckley on Tuesday a compulsory winding-up order was made in this case. Mr. Herbert, Mr. Cassel, Mr. Frank Evans, Mr. D. M. Kerly, and Mr. Sheldon were the Counsel engaged.

A NOTICE appears in the *London Gazette* for the 17th inst. to the effect that the under-mentioned companies will, at the expiration of three months from the date in question, be struck off the register and thereby dissolved:—

Anglo-Italian Pulp and Papermaking Co., Ltd.
Ely Paper Co., Ltd.
Furness Paper Co., Ltd.
International Patent Pulp and Paper Co., Ltd.
Knott Mill (Darwen) Paper Co., Ltd.
North of Europe Wood Pulp Co., Ltd.
White Ash Paper Co., Ltd.

BRITISH VISCOID CO., LTD.—A general meeting of this company is called for July 27th, at 1, Seething-lane, E.C., to receive a report from the liquidator (Mr. James Henry Mitchiner) concerning the winding-up proceedings.

WILLIAM TOD, JUN., AND CO., LTD.—The sixth annual general meeting of the shareholders of William Tod, Jun., and Co., Ltd., Springfield Paper Mills, Polton, was held at Polton on June 17th, Mr. William L. Tod, chairman of the company, in the chair. In moving the adoption of the directors' report, the chairman congratulated the shareholders on the improved result of the past year's trading. The profit earned during the twelve months was £8,106 2s. 1d., being much the largest since the formation of the company. No additions had been made to capital during the year. Dividends of 5 per cent. on the preference and 10 per cent. on the ordinary shares were declared, £1,000 was put to special reserve fund, and £1,499 1s. 11d. carried forward. Mr. James A. Hood, Rosedale, the retiring director, and Messrs. A. and J. Robertson, C.A., the auditors, were re-elected. An extraordinary general meeting was held after the ordinary meeting, at which a slight alteration in the articles of association was proposed by the directors and agreed to.

ANNUAL OUTING OF THE EMPLOYEES OF THE WEST END ENGINE WORKS CO.—The "annual shop pic-nic" in connection with the West End Engine Works is always a most enjoyable event, and this year was no exception to the rule, many, in fact, voting the excursion on Saturday, 14th of June, as the most successful that had yet been held. The party drove in seven four-in-hand coaches to Luffness, about sixteen miles down the east coast, and the day being beautifully fine, the trip proved a most exhilarating and enjoyable one. The pleasure of the gathering was enhanced by the presence of all the partners of the firm, Messrs. Thomson, Menzies and Watson. Altogether, including employees and friends, there were 250 who took part in the excursion. As in previous years, sports filled a place in the programme, and the various events were keenly contested. Handsome prizes (even better than on former occasions) were presented to the winners, this function being gracefully performed by Mrs. Thomson, wife of the senior partner. The interest taken by the employers in promoting the men's enjoyment was heartily appreciated, and it is evident that the most cordial relations exist. It may be mentioned that the West End Engine Works Co. are full up with all kinds of paper mill work.

THE annual outing of the employees of Messrs. Thomas and Green, Ltd., of Soho Mills, Wooburn, was held on Saturday, when St. Leonards and Hastings were visited. There were also present the employees from Temple Mills, Marlow, and from Messrs. Wright and Sons, Marlow. Mr. John Thomas and Mr. Roland Green accompanied the employees. The three mills were shut down, and the party was a large one and thoroughly enjoyed themselves. A vote of thanks was passed to Messrs. Thomas and Green for their kindness. Arrangements were satisfactorily carried out by Messrs. R. Loosemore, H. J. Fowler, Glibbon and Walter Glisbey (hon. secretary).

WE regret to announce the death of Mr. Henry Green, of 193, Upper Thames-street, E.C., which took place on the 20th inst. He was in his 64th year. The deceased gentleman had been in business with his brother, the late Alderman Sir Frank Green, for a period of about 40 years. He was well known in the City, and was on the board of the Papermakers' Provident Society.

THE death is announced at the age of 57 years, of Mr. Reuben Stubbs, of Winsford. He was connected with the salt business.

A FATAL ACCIDENT happened on Saturday at Messrs. R. Tullis and Co.'s Paper Works, Markinch, Fife, whereby an old man named John Williamson lost his life. Williamson had finished work for the day, and intended taking advantage of the mill goods train to Markinch Station as a short road home. Shunting operations were going on, and to escape the shock of a waggon which was approaching the one he was in he lay down in the waggon. The impact must have been rather severe, as his head got knocked against the end of the waggon causing instant death. Deceased was 71 years of age, and leaves a widow and grown-up family, with whom much sympathy has been expressed.

AT Stoneywood Works a serious accident occurred on Saturday morning last. According to an Aberdeen correspondent, James Cooper, assistant machineman, and son of the late John Cooper, manager of the making department, in passing a machine which was in motion, slipped on the greasy platform, and in attempting to save himself his arm got caught between the belt and the pulley, and he was severely crushed between the

Digitized by Google

pulley and the guard rail. Cooper had a miraculous escape, as the space between the rail and the pulley is so limited that had the rail not given way considerably he must have been killed on the spot. As it is, Cooper's left arm is broken in two places, two of his ribs are also broken, and he has been severely bruised about the chest. Cooper was immediately carried to the residence of Dr. Mavor, Bucksburn, who attended to his injuries. He was afterwards conveyed to his home in Cairnfield-terrace.

A SERIOUS accident occurred last week at Hollins Station, to a carter named Haydock, employed by the Potter and Co. Branch of the Wall Paper Manufacturers, Ltd., at Hollins Mill. The unfortunate fellow was in charge of a horse and cart engaged in taking coal from the station to the Hollins Mills. He had filled his vehicle from the wagon, and was proceeding across some wood sleepers which are placed across the railway line in one portion to enable traffic to pass from one siding to another. When crossing, one of the sleepers moved, and this startled the horse. The animal swerved round and knocked Haydock down, and the cart, which contained two tons of coal, passed over him. His wrist was broken in two or three places, and his thigh was also damaged.

MR. R. W. SINDALL, F.C.S., analyst and chemical engineer, has removed from 15, Borough High-street, London, S.E., to Chamber of Commerce-buildings, Oxford-court, 109, Cannon-street, E.C.

GALLOWAYS LTD.—The directors of Galloways, Ltd., Manchester, have declared an interim dividend at the rate of 5 per cent. per annum on the preference shares.

DENMARK exports very little paper. The value of "paper and manufactures thereof" in 1903 was only £21,667. The imports, however, during the same year amounted to £226,111.

Foreign Strawboards, &c.

The imports of straw, mill, and wood pulp boards, etc., at British ports during the week ended Saturday last were :—

STRAWBOARDS. — From Germany, 361 bales; Holland, 11,548 bales, 58 rolls.

WOOD PULP BOARDS.—From Germany, 144 bales; Norway, 135 bales; Sweden, 507 bales; United States, 72 cases, 24 rolls.

MILLBOARDS.—From Holland, 11,203 bales, 224 rolls.

PASTEBOARDS.—From Austria, 480 bales; Belgium, 3 cases; Germany, 645 bales; Holland, 5,930 bales.

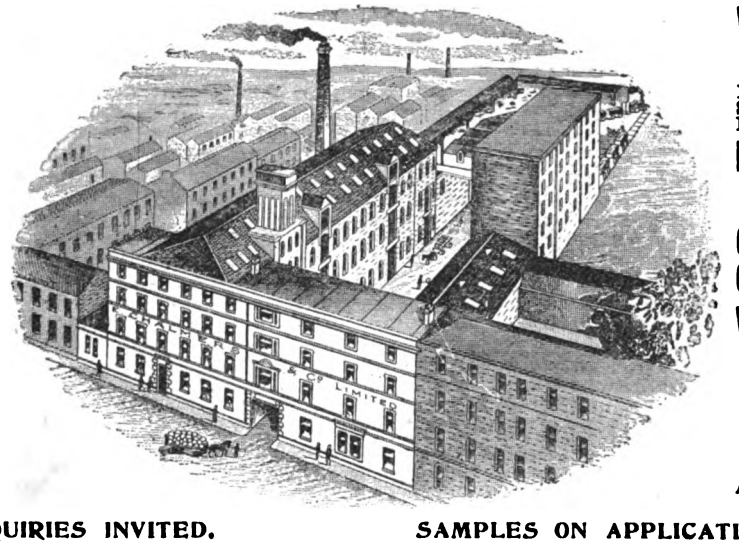
CARDBOARD.—From Canada, 200 bales, 382 rolls; Germany, 2 cases.

Telegrams: "GILES, LEITH." Telephone: No. 465.

E. CHALMERS & Co., LIMITED.

BONNINGTON, LEITH.

Linen Rags
Cotton Rags,
Canvas,
Hemp Ropes,
Manilla Ropes,
Jute & Flax Bagging,



Woollen Rags, For Filter and Silurian Papers.
New Linen and Cotton Cuttings,
Waste Papers
Paper Shavings
&c., &c.
All thoroughly well classed.

ENQUIRIES INVITED. SAMPLES ON APPLICATION.

N.B.—CASH OFFERS made for Disused Paper or other Works for Dismantling purposes.

Digitized by Google

HERE we are now right at the end of June, and on the threshold of the holiday season. And what glorious weather too! The advent of the holiday period does not often synchronise with glorious weather, so we should make the most of it when we get the chance. Judging by the astonishing number of paper trade principals who are out of town just at the moment, I am inclined to think that the most is being made of it. I had occasion to call at three paper warehouses in Upper Thames-street the other day, and in each case the principal was out of town—week-ending in the middle of the week. Business, it would seem is, either very good, or uncommonly bad: the weather gets the blame of it all—good old British weather. What would we do without it?

* * *

FROM weather to strawberries is, when you come to think about it, quite a natural transition, and a pleasingly picturesque one too. A paper trade man who lives down in Kent told me the other day that the only things that interested him at the moment were strawberries. He was wearing a huge Panama hat, and had in his hand an equally huge paper bag containing a straw basket full of luscious strawberries. "Have one?" he asked, as he moved the paper bag in my direction. "Thanks!" I said, and I had one—or, rather, two; and thumping big ones they were. "Raise these at your place?" I asked. "Yes, my boy," he replied. "Ain't they lovely? All my fruit crops are going to be a frost—except strawberries—and they are the best and the earliest I have had for years. Cherries? All gone to pot. Plums? Not going to be any good. Apples? They're going to be a complete failure. But strawberries! Why, bless you, they're magnificent. Have another, do! And I "do-ed."

* * *

Now I mention this little incident merely to illustrate the condition of the paper trade at the present moment. When one meets an ordinarily live, keen paper trade man sauntering leisurely down Ludgate-hill at noonday, with a Panama on his head and a basket of strawberries in his hands, there seems to be something wrong in the kingdom of Denmark. Either business is so desperately good that it can be allowed to take care of itself, or so confoundedly bad that it is not worth taking care of. At the moment the paper trade is in a peculiar position. Not two men in the trade will agree just now as to how things stand and as to how they are likely to shape themselves in the future. It would be quite interesting to take a plebiscite of the trade on the subject.

I THINK I shall have to ask my editor to start some sort of "Enquire Within" column in the *World's Paper Trade Review*. At all events no questions are too abstruse, seemingly, for kind enquirers to put to me. Of course it is all very interesting, and that sort of thing, in its way, but it takes a lot of time and a lot of doing. And you can always feel assured that your answer will not be regarded as completely satisfactory. I remember once being asked what was good for cauliflower worms, and when I naturally replied "Cauliflowers, of course," I mortally offended the inquirer, who promptly ceased to be a subscriber. Yet I am absolutely convinced that nothing under the sun can possibly be more acceptable or "good" for cauliflower worms than cauliflowers. I think you will agree with me there, anyhow.

* * *

WELL, my recent remarks regarding Esparto—or "'Spartie," as one still hears it called up in the North—seem to have interested a few of the *Review* readers, for which fact, I am, of course, truly thankful. I am asked now to indicate where most of the imported Esparto is consumed in this country, and at which ports it is chiefly received. The Scotch mills are the principal consumers of Esparto, although by that statement I do not mean to assert that large quantities of the grass are not used at English mills, especially up North. I cannot say with certainty what percentage of our total imports of Esparto is absorbed by Scotland at the present moment, but I remember that, in an interview with Mr. John Christie, which I wrote for this journal in 1896, the Scottish consumption of Esparto was computed to be 59 per cent. of the total imports for 1895. The Scottish mills go in for the better qualities of paper, and consequently are better customers for Esparto than the majority of the English mills.

* * *

NOW then, as to where most of our imported Esparto is landed in this country. As Scotland absorbs the bulk of the grass which comes to these islands, naturally the Scottish seaport towns are its principal recipients. I hesitate to say, off hand, where most of our Esparto is landed, but I should be very much surprised if Grantou, the flourishing seaport near Edinburgh did not take the top place. It did so at one time anyhow, and I rather think does still. I have also seen huge landings of Esparto at Leith—Granton's big brother seaport—Grangemouth. Bo'ness, Alloa and Burntisland. Glasgow and Greenock, too, sometimes do something big in the way of Esparto reception.

* * *

AT one time the Tyne and Wear did a big trade in Esparto importation, and, I believe, they do no very inconsiderable business now in the same line. At one time, indeed, the bulk of the Esparto imported into England was received at the Tyne, and to cope with it the North Eastern Railway Company built vast sheds for its reception. But these sheds proved quite inadequate for the amount

Digitized by Google

which found its way there, and then recourse was had to stacking it, like hay, in huge ricks in the open air. These were thatched over usually, in regular English farm style, but the hard-headed, hard-fisted northerners did not like them a little bit. "What's that theer stoof?" one horny-handed son of toil would ask of his mate. "Oh, that's what they calls 'Spartie.' At coombs fra' Spain, an' Treepoly an' Algeree, but durn me do a' see any gude in it. They do say it u'll put rags out ta' market entirely, but I see nowt in't, I doan't." Esparto, however, convinced even the stubborn northerners against their will. It came to stay, and it has stayed pretty well.

* * *

BY the way, it is interesting to look back at, say, quarter-century-old technical writings on the subject of papermaking, and to note the prejudice there was against the introduction of wood pulp papers. One writer, I find, says that wood pulp "is used chiefly in the manufacture of inferior news and printings, in order to fill up the engines and reduce the proportion of Esparto. Again: "Large quantities of news made entirely from wood have of late been imported from the Continent at a considerably less price than English-made printings; but this having no fibre, is as a rule tender, and wets unevenly, so that it takes a very imperfect impression when printed, and has consequently not been able to maintain its own against paper made from other materials." Strange, in the light of later experience, how all this has been falsified.

* * *

I FIND, too, that twenty-five years ago or so technical writers on papermaking, who saw a possible future for wood pulp, by no means pinned themselves down to woods of the spruce family. One daring writer goes as far as to write, I see, that: "Doubtless the time is not far distant when the vast forests of the tropics, where vegetable growth is so rapid and luxuriant, will furnish abundant materials to supply the enormously augmented demand for paper caused by the increasing intelligence of the age." Then he goes on to add that: "At present the colder regions of the earth seem to be likely to be first in the race, and the vast forests of Scandinavia are being attacked for this purpose; but the requirements of the papermaker are ever increasing, and the want is still felt of a material to help the limited though large supplies at present available."

* * *

I AM fully pursuaded that the time will come when our British papermakers will look with anxious eyes to our Colonial tropical forests as sources of fibre supply. I have ventured to ventilate the theory before in these columns, and I am not the only one who holds to that opinion. After all, it is not only woods of the spruce, pine, and hemlock families from which good pulp can be made. Years and years ago quite a lot of interest was aroused in this country by the discovery that the fibrous bark of the Baobab tree, or *Adansonia Digitata*, a huge tree that grows to luxuriant dimensions and in enormous quantities on the West Coast of Africa, made splendid paper. And look at the bush growths of the Australian, Indian, and African wilds—what an immense source of fibrous wealth they present! As matters stand now they are practically untouched. But when the time comes for their utilisation for papermaking purposes, it will be as pulp, made on the spot, that we shall use the material, not in the rough and ready raw of the bush.

* * *

THIS leads me to say that we in this more or less Occident of ours do not by any means know everything with respect to paper and papermaking. The Orient can give us points in many particulars. Refer, for example, to that interesting article in last week's *Review* on the "paper tree"—the highly ornamental and useful *Cay Gio* of Nepaul. Now the bark of that tree really gives first-rate results in its way, and much more could be made of it than is the case now, for, as a matter of fact, it is chiefly regarded as a sort of curiosity of the vegetable kingdom. Then look at the *Bronssonetia papyrifera*, a variety of mulberry tree, referred to in the same article: it is, I have heard, quite a power in some parts of India, and has been utilised from the most remote periods. But what do modern papermakers do with it? Echo answers *nil!*

* * *

I HAVE had so much to say about Esparto lately that it cannot be in the least degree surprising for my readers to learn that I have a good Esparto story up my sleeve. Of course, its Scotch, ye ken, but it will keep for the present. It is a bit long, and I have got about to the end of my allotted space without it. So we shall let it "hing fur the noo."

* * *

I WILL finish up with another story which will be new, perhaps, to most of my readers, and it has a Scotch flavour with it into the bargain. "Debates" in the Scottish Law Courts are very often a trifle bewildering to Englishmen. The ponderous phraseology ordinarily used is not understanded by the Southerners. Scottish Law Latin is, for example, *sui generis*, except where it is French. Yet, prosy and solemn though their proceedings in ordinary are, Scottish Law Lords occasionally manage to joke, and without "deefeeculty," too. The eminent Scotch advocate, Henry Erskine, was once defending a lady named Tickell, and began his address thus:—"Tickell, my client, my Lord," whereat the judge, who was a personal friend of Erskine's, promptly interposed, "Tickle her yourself, Harry. You're as well able to do it as I am!"

G. A. F.

Do you want to sell or buy machinery? Advertise in this paper.

Digitized by Google

Stocks and Shares.

The following report is supplied by Mr. E. H. Dean, stock and share broker, 101, Corporation street, Manchester. (Telegrams: "Freedom, Manchester;" 'Phone, No. 2180).

PAPER, &c.

Amount Paid.	Nominal Amount.	Name of Company.	Dividend last Year.	Prices June 22
£	£		£ s. d.	
1	1	Annandale & Son ord.	10	25 0
5	5	do. do. pref.	5	
100	100	Burgvik Co., 4½ debs. Nos. 1 3,000	4½	99 101
10	10	do. do. deferred	10	12½
10	10	do. do. 6% cum. pref	6	11½ 12½
5	5	Burnley Paper Co.	12½	7/8 1
7	7	Burt Paper, ord	nil	7/8 1
7	7	do. 6% pref	nil	7/8 1
5	5	Darwen Paper Mill Co. "A"	10	10½
10	5	do. do. "B"	10	7½ 8½
1	1	do. "C" issued at £1 pm.	10	1 1½
10	10	S. Lancashire Paper Co	10	14½ 15½
10	10	do. do. 6% pref.	10	13½ 15½
5	5	do. do. bonus	5	4½ 4½
5	5	Kellner Partington Co.	15	9½ 9½
5	5	do. do.	15	9½ 10
100	100	do. do. debs (red 1914)	4½	103½ 103½
5	5	N. of Ireland Paper Co	10	6½ 7½
5	5	Olive & Partington 5% pref.	5	5 5½
7	10	Olive Brothers	nil	6½ 6½
10	10	do. do. fully paid	nil	9½ 9½
5	4	do. do. pref.	10	4 4½
1	1	Owen, T. & Co. 6% pref.	6	1/0 18.0
100	100	do. do. debs.	5	94 96
5	5	Poulton (A. M.) & Son	4	3½ 3½
5	5	do. 5% cum. pref.	5	4½ 4½
100	Stock	do. 4½ deb.	4½	96 100
1	1	Ramsbottom Paper Co.	10	3½ 3½
1	1	do. do. cum. pref.	5	21 0 22 0
5½	5	Reach Bridge Paper Co.	10	5½ 6½
5	5	Star Paper Co.	10	8 8½
5	5	do. do. cum. pref.	10	5½ 6½
100	100	do. do. deb. stock	4½	100 101
10	10	Spicer Brothers cum. pref.	5	9½ 9½
10	10	Waterlow & Sons nom. cum. pref.	12½	13½ 15½
		do. do. nom. cum pref.	4	12½ 13
10	10	do. do. cum. pref.	3½	8 8½

CHEMICALS, &c.

1	1	Brunner, Mond & Co.	30	3/- 3/1
10	1	do. do. "New"	10	2½ 2½
10	10	do. do. 7½ cum. pref	7	15½ 15½
1	1	Castner Kellner Alkali Co.	4	14 9 15 3
1 0	Stock	do. do. 4½ deb.	4½	90 92
5	5	Crosfield & Sons Ltd.	nil	2½ 3½
5	5	do. do. cum. pref.	nil	4 4½
1	1	Electrolytic Alkali Co.	nil	
1	1	do. do. pref.	nil	
1	1	Electro Bleaching Gas Co. Ltd.	2½	5 0 5 6
10	10	Lever Soda Co. Ltd.	15	5 5½
10	10	do. do. Pref.	7	7½ 8 0
1	1	Salt Union Ltd.	nil	3/0 3/0
5	1	do. do. cum. pref.	6/-	4 4½
100	Stock	do. 4% deb. stock	4½	84 86½
100		do. 4% deb.	4½	87 89
10	10	Stevenson, Fell & Co. Ltd.	nil	7 7½
10	10	do. do. cum. pref.	5	7 7½
100	Stock	do. do. 6% deb. stock	4	20 30
10	10	Tennant, Sons & Co. Ltd.	nil	20 0 21 0
10	10	do. do. cum. pref.	7	7½ 8
100	Stock	do. do. 4½ red. debs.	5	101 103
1	1	United Alkali Co. Ltd.	½	4 0 5 0
1	1	do. do. 5% cum. pref.	5	6 0 6 0

Paper shares are still very quiet and scarcely a movement has taken place in the whole of the list given herewith. The under-current is still very firm with little or no business passing, holders preferring to wait for the half-yearly reports nearly due. Olive and Partington preference are the only shares to move in this market, and they have only eased off ⅛ to 5¼ middle. All the Lancashire mills are doing better, and as a consequence better results are looked for next month. North of Ireland, though registered in Ireland, is practically a Lancashire-managed concern, and these also have shared in the general firmness apparent.

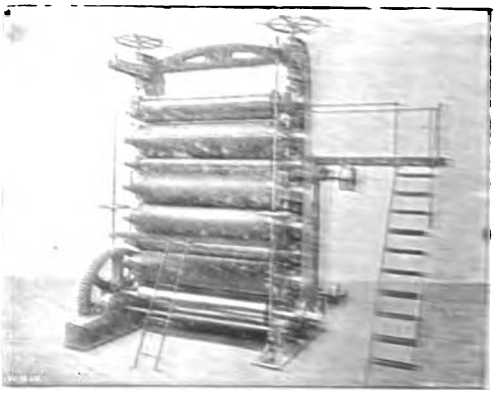
A little more activity has characterised the Chemical share market in the week just passed, with still an irregular movement in prices. Brunner Monds have been good, though not finishing at the best, the old ordinary being down ⅛ at 5½. Castner Kellners have not altered at all from last week price of 15s., but Electrolytic Alkalies have been in demand, and the ordinary are up 1s. 3d. at ¾ and the preference a similar fraction at ⅜ middle, though no seller seems to be forthcoming. Salt issues are quiet, with a drop of a ½ in the 1st Debentures, only what was expected after the rise of 4 points in a few weeks time. United Alkali, on the other hand, have been active, especially the preference and Debs., the former being better by ½ at 7⅛ bid, and the latter ¼ at 101¼ cum. div.; the ordinary show a fall of 6d. at 20s. 9d. F. Steiners preference are wanted on dividend anticipations.

James Milne & Son, Ltd.

MILTON HOUSE WORKS,

EDINBURGH.

Papermakers' Engineers.



Telegrams:—"MILNE, Edinburgh."

Digitized by Google

SPECIAL PREPAID ADVERTISEMENTS

IT IS IMPORTANT that Advertisements under any of the Headings mentioned below should reach us by the first post on Thursday to insure insertion the following day.

OFFICES—58, SHOE LANE, LONDON, E.C

Situations Vacant.

WANTED, Night Foreman; thoroughly experienced Man for the manufacture of best quality Engine-sized Papers; active and intelligent. Good salary paid to first-class man.—Apply, with full particulars, references, salary required, etc., to Pirie, Wyatt and Co., Ltd., St. Cuthbert's Paper Works, Wells, Somerset. 9493

WANTED, Traveller for Great Britain by Mill making Paper Box Boards; must have a thorough knowledge of Boards and a good acquaintance with the trade throughout England and Scotland.—Address, stating experience, etc., No 9,511, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9511

Situations Wanted.

ADVERTISER, with long experience as Cashier and all Clerical Work of Paper Mill, seeks engagement; position of trust; best credentials furnished.—Address, No. 9,498, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe lane, London, E.C. 9498

BEATERMAN wants Situation as Beaterman; used to both Machine and Air-dried Browns; very steady, and good references.—Address, No. 9,507, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9507

FINISHER, age 24, seeks Situation; used to S.C. Printings, Browns, Blottings, etc.; capable of taking charge; good references.—Write, stating wages, H. Dyer, 3, Anglo-cottages, Purfleet, Essex. 9483

SITUATION Wanted as Beaterman; accustomed to Browns, Rope Browns, etc.; highest references.—T. Bowden, Mill-street, Watchet. 9457

SITUATION Wanted by a good, all-round Mechanic; capable of taking charge; good Draughtsman; first class references.—Address, No. 9,510, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9510

SUPER-CALENDERMAN wants Situation; used to Fine Printings and Writings; first-class references.—Address, No. 9,509, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 6109

WANTED, by thoroughly Practical Papermaker, Situation as Working Foreman, Machineman, or Beaterman; smart on Browns, Rope Browns; good on Shades; excellent references.—H. Organ, Severn-terrace, Watchet. 9455

WANTED, by Young Papermaker, Situation as Foreman or Under-Manager; used to Colours, Casings, Mottled Papers, Printings, and Imitation Parchments.—Address, No. 9,492, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9492

WANTED, Situation as Machineman; accustomed to all classes of Browns; highest testimonials.—J. Linnington, Causeway-place, Watchet. 9456

Machinery.

FOR SALE, a Set of Four Hard-Grained Iron Calenders, 63 inches on body, complete in every detail; recently rebuffed and improved to stand heavy pressure; very suitable for a Brown Mill. Will be sold cheap.—Address, No. 9,453, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9453

FOR SALE, One Pearson's Refining Engine; capacity 1,000 lbs. per hour.—For full particulars, apply Fisher and Co, Tamworth. 9489

FOR SALE, Several Second-hand Dandy Rolls, equal to New.—For full particulars and sizes, write to T. J. MARSHALL & Co., Campbell Works, Stoke Newington, London, N.

Also Several Second-hand Red Rubber Deckle Straps.

If you WANT A DANDY ROLL QUICKLY, Telegraph "DANDYROLLS, LONDON."

Telephone Number: 79 "Dalston." 6288

FOR SALE, Two of Fullner's Patent Stuff Catchers (or Separators), as supplied by Messrs. James Bertram and Son, Ltd. Each tank (or funnel) is made of sheet iron, is 10-ft. diameter (at top), 11-ft. 6-in. deep, and weighs about 50 cwts.—Address, No. 9,504, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9504

MACHINERY FOR SALE.—One right and one left-hand Breaking or Potching Engine, each about 9 cwt. capacity, with Drum Washers; everything complete and in good working order. One Kollergang, complete, in first-class order, made by G. and W. Bertram, Edinburgh; stones 6-ft. dia. by 1-ft 6-in. face.—Full particulars on application to No. 9,501, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, E.C. 9501

Miscellaneous.

FOR SALE, a Quantity of Copper Pipes, 15-in. diameter; rivetted joints and flanges; have been used for a little time as Stuff Pipes.—Address, No 9,478, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9478

FOR SALE, Paper Mill near Glasgow, part Freehold, part Leasehold. One machine, 72-in., making Blottings and Tub-sized Writings; 9 Engines, 1 Turbine, 4 Boilers (3 Lancashire and 1 Babcock), Rag Boilers, 4 Beaters, 4 Breakers, excellent Fourdrinier Drying Machine, Super Glazing Calenders, Reeler, etc. All plant and appliances in going order. Railway Siding. Price, including entire plant and goodwill, £4,000.—Address, No. 9,508, Office of the WORLD' PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9508

GENTLEMAN, with influential connections, thoroughly experienced in Technical and Commercial Business, associated with industrial and commercial enterprises abroad, is about to revisit the Colonies and leading Foreign Countries, to investigate locally and report upon the prospects of increasing trade in British Exports, and would be willing to act as Representative or Sales Agent for a large and eminent manufacturing firm seeking to extend their export trade, or to appoint carefully selected agents in commercial centres.—Write, "G. W.," c/o Willings, Advertisement Offices, 162, Piccadilly, London, W. 9502

IMPORTANT for Paper Mills which use Bleached Mechanical Wood Pulps.—Experienced Papermaker is prepared to give a new formula how to bleach Dry or Moist Mechanical in Sheets The simplest and cheapest way to get a highly-bleached Mechanical.—Address, No. 9,499, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9499

OLD-ESTABLISHED FIRM of high standing and with good connections, wishes Agencies for Sulphate, Bleaching Sulphite, and Strong Sulphite Pulps. References if required.—Address, No. 9,484, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E C. 9484

SWEDISH PULP MILL wants energetic Agent to push sale of their Leather Boards amongst consumers.—Write, with full particulars, to No. 9,503, Office of the WORLD'S PAPER TRADE REVIEW, 58, Shoe-lane, London, E.C. 9503

WELL-INTRODUCED AGENT wants to Represent in Germany first-class manufacturers of Sample Bags and Labels.—Please address, "B.D., 4,567," care of Rudolf Mosse, Breslau, Germany. 9506

Digitized by Google

ATTENTION

is respectfully invited from all Manufacturers to our

NEW SYSTEM OF

LUBRICATING BEARINGS.

Those contemplating a change in their Bearings or Building New Works, should CONSULT US before deciding, as we have the

MOST UP-TO-DATE SYSTEM IN EXISTENCE.

The numerous attempted imitations prove its Excellence.

Address:—

DIAMOND LUBRICATING Co., LTD.,
94, Market Street,
Telephone 4886. **MANCHESTER.**

WILLIAM REGISTERED **VARCOE**

AND SONS,

STOKE-ON-TRENT,

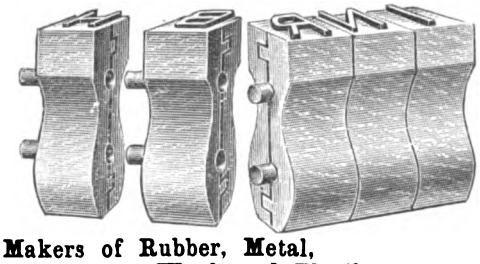
CHINA CLAYS

For PAPER-MAKERS.

WINNETT'S

Patent Transposable Stamps

FOR PAPER MAKERS.



Makers of Rubber, Metal, Wood, and Flexible Stamps.

WINNETT'S NATIONAL STAMP CO.,
125, London Road & Sugar Lane, Manchester.

The World's Paper Trade Review
A WEEKLY JOURNAL FOR PAPER MAKERS & ENGINEERS.

ESTABLISHED 1879.

No. 1227 OLD SERIES.
No 1172 NEW WEEKLY SERIES.

☛ THE LEADING JOURNAL
☛ For the British Paper & Pulp Industries.

Printed and Published EVERY FRIDAY by W. JOHN STONHILL & CO., at 58, Shoe Lane, London, E.C.

Subscription: £1 per Annum, post free to any part of the world.

REPRESENTATIVE FOR THE LANCASHIRE, YORKSHIRE, AND MIDLAND DISTRICTS:
MR. THOMAS FOSTER,
4, BOWKER STREET,
HIGHER BROUGHTON, MANCHESTER.

FRIDAY, JUNE 24, 1904.

PRINCIPAL CONTENTS.

	PAGE
Photographic Paper Manufacture	1
British Exports and Imports of Paper	3
Antaimoro Bark Paper in Madagascar	4
Past and Present	6
Drying Paper Webs	10
Broom for Paper Pulp	11
British Demand for American Paper	12
The Esparto Trade	12
Papelera Espanola, Spain	13
Gazette	13
Trade Notes	14
Commentarium	15
Stocks and Shares	18
Leaderettes	20
Reviews	22
Market Reports	24
American Imports of Paper, Paper Stock, Chemicals, Etc.	24
Wood Pulp Industry	27
Wood Pulp Press	30
British Imports of Chemical and Mechanical Wood Pulps	32
Making Paste Boards	34
Registering Deckle Edge Paper	34
New "Limiteds"	34
Tariff Changes and Regulations	35
Current Prices of Papermaking Materials	37
General Notes	42

FOR LIST OF ADVERTISERS
See Page 23.

The State of Trade.

ACCORDING to the Labour Correspondents of the Board of Trade, whose reports appear in the *Labour Gazette* for the current month, employment in the paper trades remains fair. Branches of Trade Unions with 2,392

Digitized by Google

members had 3·0 per cent. unemployed at the end of May, as compared with 3·1 per cent. at the end of April, and 3·3 per cent. a year ago. Returns received from 26 employers in Scotland show that 4,122 workpeople were employed by them at the end of May, as compared with 4,118 at the end of April, and 4,067 at the end of May, 1903.

* * *

Suggestion Boxes in Paper Mills.

WE have already referred to the introduction in paper mills of suggestion boxes, the object being to obtain ideas of value from workers to whom employers are prepared to show their appreciation by making monetary awards. At the Sittingbourne mills of Messrs. Edward Lloyd, Ltd., the boxes installed have aroused the interest and enthusiasm of the men, and the results already have proved most encouraging. A suggestion box has lately been introduced at the St. Cuthbert's Paper Works, Wells, Somerset. Mr. F. Logie Pirie, the chairman of the company, is a strong believer in the principle of what he terms co-operative production. He sees the necessity, in order to meet foreign competition and manufacturing difficulties generally, the necessity of employers and employed working together in unity and in common interest. He announced that a locked letter-box was to be fixed near the entrance to the works, intended for the reception from any workman or workwoman of suggestions, signed by the writer, of anything they thought would improve any process or machine, or tend to greater efficiency or economy. The key of the box would be kept by the resident managing director, and would be used solely by him. It was not to be expected, he said, that every suggestion would be of value, but whenever this was the case a pecuniary acknowledgment would be made to the writer by the board. Should this little experiment prove a success, the company may be encouraged to try a further experiment in the direction of the principle implied in the term co-operative production.

* * *

Foreign Paper in the British Market.

AMERICAN paper exporters have been regarded as important competitors in the British market, but it is evident from the figures printed on another page that the spurt made a few years ago has not been maintained. Last year the supplies of paper and boards from the United States only amounted to £359,897, a considerable reduction compared with either of the four preceding years. The high water-mark seems to have been reached in 1901, when the total value was £517,070. During 1903 the British imports from the States comprised £263,290 worth of unprinted paper, £35,596 worth of printed or coated paper, £27,244 worth of straw and millboards, and £33,767 worth of wood pulp boards. Compared with the values in 1899, the above figures show decreases of 9·6 per cent. in unprinted paper, 3·5 in printed paper, and 5·8 per cent. in straw and millboards. The only increase is one of £3,735 in wood pulp boards. In the following paragraph, giving figures according to the classification of the United States authorities, it will be seen that the United Kingdom is undoubtedly the most important buyer of American paper (and paper goods), but when the total value of British imports is considered, viz., £4,850,183 in 1903, the receipts from the States amount only to 7·2 per cent., whilst five years ago the percentage of the total trade was nearly 11.

* * *

American Imports and Exports of Paper, etc.

ALTHOUGH the exports of paper from the States show a substantial increase over imports, it is noteworthy that during the ten months (July-April) the latter—including paper goods—show considerable expansion compared with the corresponding period of the previous year. The exports were of the value of £1,218,678 and the imports £886,713, increases respectively of £24,150 and £110,088. Over 66 per cent. of the export trade of the United States is represented by shipments to the United Kingdom, British North America, and Australia, the value of the supplies during the ten months ended April last being £360,144, £273,205, and £175,443 respectively. Compared with the corresponding period of the previous year the demand on the part of the United Kingdom shows an increase of £54,248, and Canadian imports an addition of £25,770, but American paper in the Australian market has lost ground to the extent of £43,704. It is remarkable the strong hold the Germans have in the United States, the imports from Germany during July-April amounting to nearly 60 per cent. of the total, whilst the shipments from the United Kingdom to the States amount to under 17 per cent. Compared with the corresponding period of the previous year, the American imports of German goods (£528,093) show an increase of £60,411, and receipts from the United Kingdom (£148,092) an addition of £17,795.

* * *

British Paper Exports to U.S.A.

IT is satisfactory to find that a substantial improvement has taken place in the exports

Digitized by Google

of British paper to the United States during the last five years. The total value last year was £83,573, as compared with £54,132 in 1899. During the period mentioned writings, printings, and envelopes show a jump from £13,114 to £31,550; hangings, an increase from £12,843 to £22,924; and boards (including cards and playing cards), an advance from £1,157 to £3,855. In other descriptions a falling off took place, the value in 1899 being £27,018 as against £25,215 last year.

Reviews.

UNDER the heading of "The Fibrous Constituents of Paper," Mr. Clayton Beadle, F.C.S., F.R.M.S., contributes a further article in the pages of *Technics* for June (George Newnes, Ltd.). In the previous number Mr. Beadle dealt with esparto, and the subject of the present contribution is cotton, also illustrated with photo-micrographs by Mr. John Christie, F.R.M.S. Cotton, the author says, may be regarded as the omega of papermaking materials—in the sense that it bids fair to outlive all existing materials, not as to quantity, but durability. It consists of the purest and least destructible kind of cellulose, and it has stood the test of time better than all other papermaking materials. Practically the only source of cotton to the papermaker is cotton rags. The unripe fibres, which remain attached to the husks of the cotton seed, will undoubtedly be available for paper manufacture so soon as a process is devised, either mechanical or chemical, for their separation from the husks. The special papermaking characteristics of cotton are largely to be accounted for when regard is had to the peculiar contour of the section, as well as to the spiral twistings of the fibre. It consists chemically of pure cellulose ($C_6 H_{10} O_5$) in its most inert form. The natural fibre contains about 0·5 per cent. of waxy bodies, 0·5 per cent. of nitrogenous substances, and 7 per cent. of moisture. The surface or cuticle of the fibre is more resistant than the granular cellulose constituting the interior. The cuticular cellulose constitutes about 10 per cent. of the weight, and the remaining 90 per cent. is known as the intercuticular cellulose. This distinction is of very great moment to the papermaker, perhaps without his knowing it; the general behaviour of cotton, when mechanically treated, depends largely on the extent of the removal of the cuticular cellulose. Old and new rags behave very differently in this respect. Mr. Beadle gives details of the treatment of rags in the paper mill, together with a table showing the yield and loss on boiling various grades of cotton rags. Included in the illustrations is a photo-micrograph of a longitudinal section of cotton fibre showing outer and inner cuticular layers and intercuticular substance (magnified 1,000 diameters). This photo-micrograph is by Mr. H. de Mosenthal, F.I.C., who has succeeded in dividing a cotton fibre longitudinally.

ANOTHER article of interest to our readers in the June number of *Technics* is that on "Alkali and Chlorine Products," by Mr. John B. C. Kershaw, F.I.C. It is stated that over thirty electrolytic alkali works are now in operation in Europe and America. Illustrations are given showing the Aussig Bell Cell, the Hargreaves-Bird Cell, Outhenin-Chalandre Cell, the Castner Mercury Cell (also a view of the cell room at the Castner-Kellner works), the Acker fusion cell, Kellner hypochlorite cell, etc." It is pointed out that the electrolytic bleaching industry has not developed so rapidly as was at one time hoped, since hypochlorite of lime (bleaching powder, or *Bleach*, as it is called in the trade) is still the cheaper bleaching agent. at the present market prices of this chemical; and use of sodium hypochlorite is confined to those industries where the absence of lime in the bleaching solution is a distinct advantage, or to localities where the industrial conditions favour the installation of an electrolytic plant. The rapid development of the electrolytic alkali and bleach industry during the last ten years has served to handicap the progress of electrolytic bleaching, since hypochlorite of lime is now selling at £4 5s. per ton as compared with £6 10s. a few years ago; and it has recently been as low as £3 10s. 6d. per ton. This fall in the price of bleach in recent years has been chiefly due to the competition of the bleach made in the electrolytic alkali works, with that produced by the Le Blanc process; but it has not favoured the development of the allied sodium hypochlorite industry, and it is now reacting unfavourably upon the progress of the electrolytic alkali industry itself.

THE most notable installations of electrolytic bleaching plant, says Mr. Kershaw, are to be found in France, Germany and Sweden, Messrs. Corbin and Cie. having a 700-h.p. installation of their own hypochlorite cell at Lancy, Isère. In this case the solution is used for bleaching wood pulp and cellulose. In America, installations of a somewhat similar character are to be found in connection with the paper pulp factories. Across the Atlantic, however, the tendency is to electrolyse sodium chloride in a diaphragm type of cell, and to absorb the liberated chlorine in a separate vessel, either in the caustic soda lye obtained from the cell, or in milk of lime. In the latter case, the caustic soda solution is run away as a waste product, since it is considered it would not pay to purify it from the undecomposed salt, and to obtain solid caustic soda. According to Professor Haber, who has recently inspected some of these plants, this method of working is more suited to the conditions obtaining across the Atlantic than the method adopted in Europe.

WE have also received from Geo. Newnes, Ltd., Part III. of "A Technological and Scientific Dictionary" (one shilling net), and Part 7 of "The Survey Gazetteer of the

Digitized by Google

British Isles," with maps and plans (in 20 parts at 7d. each net). The former publication will be found of great service to the student of technology.

LIST OF ADVERTISERS.

Where number of page is omitted the advertisement does not appear in this issue.

Alkali, Etc. PAGE
Brunner, Mond & Co., Ltd. ...
United Alkali Co., Ltd. ... ... *Cover iv.*

Analysts, Experts, Engineers, &c.
Ekman, C. D. 29
Hurst, George H. 33
Sindall, R. W. 29
Stevens, Dr. Hy. P. ... ...

Belting, etc.
Sutcliffe Bros. ... ...

Boiler Coverings and Composition.
Sutcliffe Bros. ... ...

Chemicals.
Bramwell, E., & Son ... ...
Brunner, Mond & Co., Ltd. ... ...
Pochin, H. D., & Co., Ltd. ... ...
United Alkali Co., Ltd. ... ... *Cover iv.*

Colours.
Cardwell, J. L., & Co. 33
Cornbrook Chemical Co. 29
Hinshelwood, Thos., & Co. 33
Levinstein, Ltd. 33
Manchester Aniline Co. 33
Pochin, H. D., & Co., Ltd. ... ...
Via Gellia Colour Co. 33

Dandy Rolls.
Green, W., & Son ... ...
Marshall, T. J., & Co. 19

Economisers (Fuel).
Green, E., & Son, Ltd. ... ...

Engines (Steam).
Milne, James, & Son, Ltd , ...

Esparto Pulp.
Grondal, A. L. ... ...

Felts and Jackets (Papermakers').
Huyck, F. C., & Sons ... ...
Kenyon, James, & Son 26
Porritt, Joseph, & Son ... ...
Whitehead, R. R., & Bros , Ltd. ... ...

Mill Refuse, Treatment of.
Liquid Destructors, Ltd. ... ...

Minerals, Etc.
Belvoir and Newark Plaster Co. 33
Best, James, and Sons 33
Birch, W. Singleton, & Son, Ltd. 33
Bodelva and Lantern China Clay Works 33
Cafferata & Co. 33
China Clay Co. 33
Howe, John, & Co. 33
Lassale, Th. 33
Pochin, H. D., & Co., Ltd. ... ...
Rogers, J., & Co. 33
Satinite Co. ... ...
Varcoe & Sons 20
Winser & Co. 33

Miscellaneous.
Directory 33
Machinery for Sale and Wanted 19
Situations Vacant and Wanted 19

Oils and Lubricants.
Diamond Oil Co., Ltd. 20
Sutcliffe Bros 28

Paper and Pulp Making Machinery.
Bentley & Jackson, Ltd. 8–9
Bertram, James, & Son, Ltd. ... ... *Cover iii.*
Bertrams Ltd. ... ...
Dietrich, Robert ... ...
Füllner, H. ... ...
Lechla, O. ... ...
Marx, J., & Co. 11

Paper & Pulpmaking Machinery – *(Continued.)* PAGE
Masson, Scott & Co., Ltd. ... ...
Milne, James, & Son, Ltd. 18
Voith, J. M. 11
Walmsley, Chas., & Co., Ltd. 5
Wandel, Chr. ... ...
West End Engine Works ... ...
Wurster, Dr. C. 13

Paper Bag Machinery.
Bumsted & Chandler ... ...

Paper Stock.
Beaumont, J., & Co. 29
Bradford, John S., & Co. ... ...
Caldwell, J., & Sons 29
Chalmers, E., & Co., Ltd. 15
Freese, Jean 29
Hay, R. H., & Co. ... ...
Hyman Bros. ... ...

Rag Pulps, &c.
Chesterfield Wood Pulp Works Co. ... ...

Roll and Plate Engravers, etc.
Fulton, John, & Co. 23

Rubber Stamps, &c.
Winnett's National Stamp Co. 20

Sizing.
Grove Chemical Co., Ltd. 33

Strawboard Centres.
Boyd, Hart & Co. 33

Straw Pulp.
Grondal, A. L. ... ...
Stroostoffabriek "Phœnix" 13
Vereinigte Strohstoff-Fabriken ... ...

Tools (Papermakers').
Makin, William, & Sons 31

Typewriters.
Remington Typewriter ... ...

Ventilators, Etc.
Sutcliff Ventilating and Drying Co. 33

Water Supplies.
Abundant Water Supply Co. 33
Isler, C., & Co. 33
Le Grand & Sutcliff 29

Wood Pulp.
Actiengesellschaft für Maschinenpapier-Fabrikation ... 26
Alsing & Co., Ltd. 33
Andrews & Co., Ltd. ... ... *Cover i.*
Berner & Nielson ... ...
Forsmarks Cellulose Fabrik ... ...
Grant, W., & Co. 33
Grondal, A. L. ... ...
Hay, R. H., & Co. ... ...
Henderson, Craig & Co., Ltd. 26
Johnsen, Jorgensen and Wettre ... ...
Kommanditbolaget C. Fr. Waern & Co 29
Lovenskiold-Fossum 26
Makin & Bancroft 25
Munds, Wilh. 29
Olrog, Thv. ... ...
Skotselv Cellulosefabrik ... ...
Storviks Sulfit Aktiebolag 26
Taylor, F. D., & Co. ... ...
Taylor, W. G., & Co., Ltd. ... ...
Tilsit Zellstoff Fabrik ... ...
Wertheim, A., & Co. ... ... *Cover ii.*
Wood, Harry B. 26

JOHN FULTON & CO., Engravers of Rollers for Printing Wall Papers, etc., also of Rollers for Embossing all kinds of Paper.—Knowsley Street Engraving Works, Manchester.

MAKERS of Steam Drying Apparatus, which would replace the Air Drying of Paper, and if possible work automatically, please address offers to "R. G., 71," care of Haasenstein and Vogler, A.G., Berlin, W., 8. 9512

IT PAYS TO ADVERTISE IN
The World's Paper Trade Revi

Digitized by Google

MARKET REPORTS.

Telegrams—"STONHILL, LONDON."

Chemicals.

The chemical trade quiet. Quotations:—AMMONIA ALKALI, 58 per cent., £4 10s.; CAUSTIC SODA, 76 to 77 per cent., £10 10s.; BLEACHING POWDER, soft wood, £4 5s. to £4 10s.; SODA CRYSTALS, £2 17s. 6d. to £3 5s.; and RECOVERED SULPHUR, £5 5s. to £5 10s.

Chemical Wood Pulps.

SULPHITE pulps are scarce, particularly easy bleaching qualities, and it is difficult to obtain full supplies against contracts booked some time ago for delivery over the year. There is very little SODA pulp unsold for this year, and holders are maintaining prices.

Mechanical Wood Pulps.

A good many parcels have been sold for prompt shipment by needy sellers, which depressed the market; there is a better feeling now, and makers will not entertain business below 34s. f.o.b.

Esparto.

The enquiry has died down to some extent, and is now rather limited, buyers looking for easier terms later on. Meantime quotations are unaltered.

The arrivals of Esparto at British ports last week were:—From Arzew, 914 tons (to the order of Robert Hay and Co.), landed Tayport, 250 tons landed Liverpool; from Almeria, 1,225 trusses landed Grangemouth, 2,830 bales landed Liverpool; from Bona, 550 tons (to the order of Crookston Bros.), landed Glasgow; and from Venice, 198 bales, landed Liverpool.

Home and Foreign Rags.

There is a strong demand for HOME RAGS, and prices, for some of the lower grades especially, show an upward tendency.

The exports of PAPER STOCK last week were:—To Australia, 32 tons; Belgium, 70 tons; Canada, 2 tons; France, 168 tons; Germany, 60 tons; Holland, 144 tons; Sweden, 12 tons; and United States, 168 tons.

In FOREIGN RAGS, a brisk demand is current for French and Belgian, and a fair business is reported by Dutch and German packers.

British imports last week were:—From Belgium, 1,060 bales; Denmark, 71 bales; Egypt, 180 bales; France, 2,276 bales; Germany, 795 bales; Holland, 687 bales; India, 6 bales; Italy, 107 bales; Norway, 34 bales; Prussia, 17 bales; Russia, 61 bales; Turkey, 341 bales; United States, 13 bales.

Sizing.

Trade dull; prices unchanged.

Rosin.

Market strong with a good demand; supplies small and well held. Quotations show a considerable advance.

Minerals, etc.

CHINA CLAY is in steady demand, and a moderate amount of business is reported in MINERAL WHITE, FRENCH CHALKS, SATINITE, and BARYTES.

AMERICAN IMPORTS OF Paper, Paper Stock, Chemicals, &c.

The following is the latest weekly list, compiled from official returns, of American imports from the ports mentioned:—

Paper.

ANTWERP.—New York: 11 cases, W. Seyd; 8 cases, Sheldon and Co.; 126 bales, Stursberg, Schell and Co.; 5 cases, Downing and Co.; 15 cases, G. Gennert; 2 cases, Einstein Wolff and Co.; 1 case, A. L. Metzgar; 12 cases, Dejonge and Co.; 15 cases, W. Huermann; 4 cases, L. C. Wagner.

BREMEN.—New York: 23 cases, Kupfer Bros.; 11 cases, R. F. Lang.

GLASGOW.—New York: 13 cases, McLaurin Bros.

HAMBURG.—New York: 37 cases, A. Kraut; 4 cases, Stone and Co.; 10 cases, Amsinck and Co.; 135 cases, Dejonge and Co.

LIVERPOOL.—New York: 100 cases, American Tobacco Co.; 4 cases, Wallace and Co.; 1 case, Butterfield and Co. Boston: 25 cases, B. D. Webbe; 2 cases, Stone and Downer Co.; 2 cases, Davies, Turner and Co.

LONDON.—New York: 3 cases, Favor, Ruhl and Co.

ROTTERDAM.—New York: 22 cases, Amsinck and Co.; 149 cases, Hensel, Bruckmann and Lorbacher; 7 cases, Sheldon and Co.; 31 cases, Dejonge and Co.; 8 cases, Dingelstedt and Co.; 4 cases, Leclerq and Co.; 5 cases, Miller, Sloan and Wright; 2 cases, Heinze and Co.

Manillas.

ANTWERP.—New York: 273 bales, A. Kazenstein; 308 bales, F. Salomon and Co. Boston: 209 bales, Butterworth and Co.

GLASGOW.—Boston: 43 coils, Hollingsworth and Vose Co.

HAMBURG.—New York: 112 bales, Salomon Bros. and Co.

HULL.—New York: 182 cases, F. Salomon and Co.

LONDON.—Boston: 215 coils, Hollingsworth and Vose Co.

ROTTERDAM.—New York: 190 bales, F. Salomon and Co.

Rags.

ANTWERP.—New York: 485 bales, A. Kazenstein; 261 bales, P. Berlowitz; 499 bales, Butterworth and Co.; 38 bales, P. Sharp and Co.; 246 bales, F. Salomon and Co.; 134 bales, A. Salomon; 399 bales, Castle, Gottheil and Co.; 180 bales, Millar

Digitized by Google

and Co.; 769 bales, Train, Smith and Co. Boston: 255 bales, W. F. Corne; 512 bales, to order; 308 bales, Train, Smith and Co.; 230 bales, Crocker, Burbank and Co.; 68 bales, Downing and Co.; 969 bales, Butterworth and Co.

CENTRAL AMERICA.—New York: 6 bales, Liebmann and Co.; 30 bales, C. Harley.

GLASGOW.—New York: 62 bales, F. R. Walker; 260 bales, Lyon and Co. Boston: 39 bales, to order.

HAMBURG.—New York: 93 bales, F. Salomon and Co.; 214 bales, Train, Smith and Co.

HULL.—New York: 283 bales, Train, Smith and Co.; 133 bales, Salomon Bros.; 46 bales, Castle, Gottheil and Co.; 106 bales, Butterworth and Co.; 56 bales, Millar and Co.; 77 bales, F. Salomon and Co.; 265 bales, A. Salomon.

LIVERPOOL.—New York: 87 bales, Train, Smith and Co. Boston: 179 bales, Train, Smith and Co.; 120 bales, Butterworth and Co.

LONDON.—Boston: 33 bales, Train, Smith and Co. Philadelphia: 32 bales, Brown Bros. and Co.; 100 bales, Mueller, Schall and Co. Newport News: 84 bales, Lyon and Co.

MANCHESTER.—Boston: 34 bales, A. Kazenstein; 154 bales, Butterworth and Co.; 41 bales, Reis and Co.

LEGHORN.—New York: 165 bales, Castle, Gottheil and Co.

MESSINA.—New York: 181 bales, Castle, Gottheil and Co.

ROTTERDAM.—New York: 185 bales, Millar and Co.; 52 bales, Castle, Gottheil and Co.

Waste Paper.

GLASGOW.—New York: 181 bales, Millar and Co. Boston: 229 bales, True and McClelland; 109 bales, Train, Smith and Co.

LIVERPOOL.—Boston: 70 bales, Train, Smith and Co.

LONDON.—Boston: 694 bales, Wheelwright Paper Co.; 248 bales, Crocker, Burbank and Co.

Wood Pulp.

ANTWERP.—New York: 586 bales, 100 tons, R. Helwig.

CHRISTIANIA.—Boston: 4,136 bales, Bertuch and Co.; 440 bales, Page, Newell and Co.

COPENHAGEN.—New York: 812 bales, 100 tons, Bertuch and Co.

HAMBURG.—New York: 320 bales, 45 tons, F. Salomon and Co.

ROTTERDAM.—New York: 320 bales, 45 tons, F. Salomon and Co.

Straw Pulp.

ROTTERDAM.—New York: 104 bales, 20 tons, Jean Freese.

Bleaching Powder.

ANTWERP.—New York: 71 casks, F. A. Reichard.

CHRISTIANIA.—Boston: 50 casks, Roessler and Hasslacher Co.

BRISTOL.—New York: 101 casks, J. L. and D. S. Riker.

HAMBURG.—New York: 569 drums, Roessler and Hasslacher.

HULL.—New York: 36 casks, J. L. and D. S. Riker.

LIVERPOOL.—New York: 241 casks, J. L. and D. S. Riker.

Soda Ash.

GLASGOW.—Philadelphia: 26 tierces, to order.

LIVERPOOL.—New York: 40 casks, Wing and Evans. Boston: 120 bags, 13 tierces, Linder and Meyer.

Caustic Soda.

HULL.—New York: 100 drums, Hill's Son and Co.

LIVERPOOL.—New York: 100 drums, J. L. and D. S. Riker.

China Clay.

LIVERPOOL.—New York: 200 casks, Moore and Munger; 30 casks, Perkins, Goodwin and Co.; 300 casks, Knight and Co.; 80 cases, Morey and Co.; 100 casks, Salomon and Co.; 60 casks, F. A. Reichard. Boston: 250 casks, Salomon and Co.; 200 casks, J. Richardson.

MANCHESTER.—Boston: 200 casks, Bush and Co.; 72 casks, Knight and Co.

Sizing.

LIVERPOOL.—Boston: 92 bags, Groom and Co.; 73 bags, Train, Smith and Co.

ROTTERDAM.—New York: 121 bales, Butterworth and Co.

Pearl Hardening.

LIVERPOOL.—New York: 10 casks, Perkins, Goodwin and Co.

METALS.—Under the date of Wednesday last, Messrs. I. and J. Hyman, metal merchants, Britannia-street, Kings-cross, quote (subject to market fluctuations) their prices for Old Scrap Metals:—

	Per Ton.
Clean Copper	£50 0 0
Tinned or Brassery Copper	47 0 0
Gun Metal	46 0 0
Brass	37 0 0
Old Zinc	17 0 0
New Zinc Cuttings	18 10 0
Lead (subject to usual 4-lbs. per cwt. tare)	10 7 6
Hollow Pewter	90 0 0

GOOD advertising is the pathfinder for all who seek success in business.—*Printers' Ink.*

Telegraphic Address: "APSLEY, LIVERPOOL." Telephone: 332.
MAKIN & BANCROFT,
Codes { A B C, 4th Edition, Liebers. Private.
Apsley Buildings, 4, Old Hall Street, Liverpool.
SOLE BRITISH AGENTS FOR THE **SAULT STE. MARIE PULP & PAPER Co.**
ONTARIO, CANADA.
Direct Importers of All Papermakers' Materials.

Digitized by Google

Storviks Sulfit Aktie Bolag,

TRADE MARK

HS

MANUFACTURERS OF

EXTRA STRONG SULPHITE PULP,

Specially recommended where Great Strength is Required.

For Samples and Quotations apply to the Sole Agents:

HENDERSON, CRAIG & CO., Limited,

97, QUEEN VICTORIA STREET, LONDON, E.C.

Akt.-Ges. für Maschinenpapierfabrikation Aschaffenburg,

MANUFACTURERS OF

BLEACHED and UNBLEACHED

Sulphite Wood Pulp

— Mitscherlich and Ritter-Kellner Systems —

Of finest quality, excellent strength, length of fibre and colour. Daily production 120—130 tons dry weight.

Mills at { *Aschaffenburg a. Main. Stockstadt a. Main.*
Walsum a. Rhein (formerly Niederrheinische Zellstoff A.-G.).

Sole Agent: HARRY B. WOOD, CATHEDRAL STREET, MANCHESTER.

TRADE MARK.

LÖVENSKIOLD-FOSSUM,

SKIEN, NORWAY.

EXPORTER OF

Moist Pine Pulp.

Sole Agents for England and Ireland:—
HANS DESSEN & CO.,
2, Great Winchester, Street, LONDON, E.C.

Sole Agents for Scotland:—
W. GRANT & CO.,
4a, St. Andrew Square, EDINBURGH.

JAMES KENYON and SON,

DERBY STREET MILLS,
BURY, LANCASHIRE.

ALL FELTS for Papermakers.

Telegrams: "KENYON, BURY."

Digitized by Google

THE WORLD'S

Wood Pulp Industry.

A Weekly Record of the Latest Information of Interest to Manufacturers of Chemical and Mechanical Wood Pulps, Agents, Buyers, and Others.

LONDON: 58, SHOE LANE, E.C.

Week's British Imports.

THE arrivals of wood pulp at British ports during the week ended June 11th were from the following countries:—

CHEMICAL.

Dry.

Sweden	1,911 tons	£15,374
Norway	753 ,,	5,944
Prussia	60 ,,	479
Holland	41 ,,	329
Germany	15 ,,	114
Finland	11 ,,	77
Belgium	10 ,,	120

Wet.

Norway	708 tons	£2,972
Sweden	200 ,,	860

MECHANICAL.

Dry.

Norway	120 tons	£900

Wet.

Canada	4,461 tons	£9,786
Norway	2,107 ,,	4,634
Sweden	38 ,,	225

The Markets.

ACCORDING to advices from Christiania the market for mechanical wood pulp is depressed. Sales have lately been made at lower prices.

BRITISH buyers look to a steady decline in Scandinavian mechanical, but makers do not care to go below 34s. f.o.b.

IN chemical pulp a good business has lately been current, at well maintained prices.

THE market in the United States for mechanical wood pulp is easier, owing to supplies being more freely offered. Some manufacturers are holding back their surplus against the possibility of a dry summer. The prices is about 14 to 15 dols. at mill.

THE American market for chemical wood pulps is steady. The demand has slackened somewhat for foreign grades of sulphite. American soda pulps firm.

Agreement as to Production in Norway, Sweden, and Finland.

THE Finnish pulp manufacturers have completed arrangements with those in Sweden and Norway, whereby the production of pulp will be lessened in all three countries, if considered desirable in the interests of the trade. The production last year (33,144 tons) was 50 per cent. above that for 1902.

St. John's Sulphite Mill, N.B.

WITH an improvement in the sulphite wood pulp industry the English directors of this undertaking thought it possible to run the mill at a profit, and negotiations were set on foot to increase the company's capital. It is now stated that the mill at Mispec, after running practically on full time, closed down without warning. The mill employed about 120 men and had a capacity of thirty tons of pulp a day. During the two weeks preceding the closing the mill had not been running quite up to its full capacity.

Germany.

CONSIDERABLE extensions are being made to the cellulose works at Mannheim of the Waldhof Co. Seven new boilers will be put in.

IT is understood that the thread spinning mill constructed by the Waldhof Cellulosefabrik will shortly be able to place its product on the market. The thread is manufactured from wood pulp according to the Kellner-Türk process, which a company about to be formed to work.

Digitized by Google

Imports into France.

THE imports of mechanical pulp into France during March and April amounted to 174,680 metrical quintals (10 of which equal about one ton), as compared with 100,523 metrical quintals in the corresponding period of 1903, and 149,437 metrical quintals in March-April, 1902.

THE French imports of chemical pulps during March and April last were 121,874 metrical quintals, against 122,778 metrical quintals in the same period of 1903, and 125,822 metrical quintals in March-April, 1902.

Spanish Imports.

A BRITISH consular report gives the imports of wood pulp at Bilbao in 1903 as 7,638 tons, a decrease of 2,601 tons, compared with the previous year. Norway supplied 3,903 tons, Russia 1,482 tons, and Sweden 154 tons.

Canada.

MR. J. R. BOOTH'S new pulp mill has started operations. The mill, which is modern and complete in its equipment, is situated in the Chaudiere district between Hull and Ottawa, and directly opposite the Booth saw mill. The pulp mill is operated by water power, being situated on the Ottawa River.

Canadian Pulp Wood.

AT the annual banquet of the Quebec Pulp Wood Association, Mr. H. M. Price, the president, said they were joined together to promote the pulp wood interests in the Province of Quebec by union and co-operation, and to impress upon the shippers that it was in their interests to ship nothing but pulp wood of the very best quality; to see that all contracts were observed, and see that they got the necessary railway facilities. After referring to some of the other objects of the association, Mr. Price went on to deal with the shipment of pulp wood to the United States. It was apparent to everyone in the business that the United States was dependent to a great extent on Canada for its supply of pulp wood. From statistics, with which he had been furnished, he found that the United States consumed about 2,000,000 cords of pulp wood, and from the same figures he found that Canada supplied about 400,000 cords. Canada shipped about the same quantity of ground pulp wood as in the cord. He was of the opinion that the whole of the pulp wood should be manufactured in Canada. He was a strong protectionist, and believed that all Canadians should be protectionists in so far as protecting their industries was concerned. If steps were taken to protect the pulp wood industry it would mean that capital would be brought into the country, and the pulp wood would be manufactured in Canada.

MR. E. W. TOBIN, M.P. for Richmond and Volfe, spoke at some length on the pulp wood question. There had, he said, been a great increase in the pulp wood business during the past few years. While they might all be protectionists in so far as the lumber business was concerned, he believed that what they really needed was more capital. They were getting a good price for pulp wood to-day. The mills in Canada were getting 4 dols. to 5 dols. a cord, while in New York State it was selling for 11 dols. a cord. He did not believe in an export duty on pulp wood, because if that were put on it would affect the farmers and settlers.

Australia.

MR. D. H. ROSS, Canadian trade representative to Australia, in his last report to the Canadian Government, writes as follows from Melbourne, regarding pulp: "Samples forwarded to this office by Canadian manufacturers of pulp, have been submitted to the local paper mills, but I regret to report that nothing suitable for local requirements has, so far, been received. The local mills require sulphite (not mechanical) pulp, in unbleached and bleached sheets, packed in bales weighing about 3½ cwt. The unbleached pulp is used in the manufacture of brown wrapping paper, which industry is protected by a customs duty of £3 (say 14·60 dols.) per ton. The bleached pulp is required for strong cartridge papers, etc. The Melbourne Paper Mills use local materials in making a substitute for cheap pulp, which answers for 'filling' purposes. It is essential to make a dry pulp, equalling in quality that now received from Norway and Germany, in order to obtain a footing in this market. An experimental shipment of Canadian pulp came forward to this city some years ago, but owing to its dampness, the contents of the bales—especially in the centre of the packages—was rotten when it arrived."

TO OUR READERS.—When writing to advertisers please mention the *World's Paper Trade Review* as the source of information.

Cannot CUT, CLOG, FLY or DRY.
Always uniform and pure. Most reliable.

"CLIMAX" WHEEL GREASE

Extensively used and admitted as the
"BEST WHEEL GREASE EVER USED."

The "CLIMAX"

LUBRICATING CREAM

For all kinds of Engines, Shafting, &c. Supersedes Oil. Saves 25 to 75 % every year. No dirt, no waste, no attention, no heated Bearings. Perfect Lubrication. A trial will prove.

Sole Address:
SUTCLIFFE BROS., Albert Works, Godley, near Manchester.

Digitized by Google

BUSINESS CARDS.

Rates for Weekly Insertions of announcements of this character may be obtained on application to W. JOHN STONHILL & CO., 58, Shoe Lane, London, E.C.

Telegraphic Address:—"RELIABLE." National Telephone, 1977.

J. BEAUMONT & CO.,

Wholesale Rag & Paper Stock MERCHANTS.

ALL GRADES OF COTTON RAGS, NEW RAGS, BAGGING, Etc.

Pump St., Oldham Road, MANCHESTER.

BFV BLEACHED SULPHATE,

Kommanditbolaget C. Fr. Wærn & Co.,

GOTHENBURG.

WATER SUPPLIES

NORTON'S PATENT

Abyssinian and Artesian Tube Wells.

LE GRAND & SUTCLIFF,

Hydraulic Engineers,

Magdala Works, Bunhill Row, London

PAPER CUTTINGS

Bought for Cash—In Large Quantities

By EMIL ULMER,

Cologne-on-the-Rhine, Germany.

Regular Buyers per Annum 4046

R. W. SINDALL, F.C.S.,

Chamber of Commerce Buildings,

OXFORD COURT, 109, CANNON STREET.

Tel. Address: "ALKALINITY, LONDON." Telephone No.: BANK 888.

ANALYST AND CHEMICAL ENGINEER.

WOOD PULP AND PAPER TRADE EXPERT.

CHEMICAL WORK FOR PAPER MILLS BY CONTRACT.

VACANCY FOR PUPILS.

Wilh. MUNDS,

DRESDEN, SAXONY.

REPRESENTATIVE for 15 FACTORIES

CENTRAL OFFICE for the SALE of

Sulphite, Sulphate, Soda & STRAW PULPS,

Bleached and Unbleached, All Qualities and all Processes.

JOHN CALDWELL & SONS, Nat. Tel. 390. T. A.: "Fents."

SUN MILLS, ANCOATS, MANCHESTER,

Wholesale Rag and Paper Stock MERCHANTS.

Buyers of Shirt Cuttings, Underclothing Cuttings, Tailors' Cuttings; also all grades of New Rag Cuttings Warehouse Print Tabs, Fents, Twines, &c.

Terms—CASH. Bankers—L. & Y. Bank, Shudehill.

CORNBROOK CHEMICAL Co.,

STOCKPORT LIMITED,

(Successors to ROBERTS DALE & Co., Manchester & Warrington)

DRY & PULP COLOUR MANUFACTURERS

For the PAPER TRADE.

Paste Blues, Chromes, etc.

Any sample matched. Enquiries solicited.

C. D. EKMAN,

GRAVESEND,

Chemical Engineer,

SULPHITE PULP and PAPER TRADE EXPERT.

SCANDINAVIAN BUSINESS A SPECIALITY.

A Well-known German Parchment Paper MANUFACTURING FIRM

WANT to arrange with some important Firm in the trade, having capital at command, to co-operate with them in the manufacture of PARCHMENT PAPER SPECIALITIES—extensively bought in England—such as Opaline, Alabaster-Parchment Paper, Decoriste, Writing and Cardboard ditto, &c.

Address, in German, "H. T., 3215," care of RUDOLF MOSSE, Hamburg. 4047

JEAN FREESE,

Dealer, Importer, Agent.

China Clay,

Paper Stocks,

Sulphite Pulps,

Bleaching Powder.

310, Vanderbilt Building, 132, Nassau Street,

NEW YORK CITY.

Correspondence Solicited.

Digitized by Google

Wood Pulp Press.

The accompanying illustrations relate to a wood pulp press, patented by Mr. R. E. Buschert. Fig. 1 is a side elevation. Fig. 2 is a plan view. Figs. 3, 4, 5 and 6 are transverse sections on lines X X, Y Y, Z Z and U U, respectively, in Fig. 1. Fig. 7 is a longitudinal sectional view of one of the cylinders containing the pistons which retract the follower in the press chamber, and Figs. 8 and 9 are enlarged face and top views of the strainer with parts broken away.

A and B represent two cylinders of ordinary construction for hydraulic or hydrostatic pressure. Between said cylinders and in line therewith is the press chamber C, which is formed with parallel imperforate sides and open ends and has connected to it the pulp induction pipe *g*, which is provided with a suitable valve or cock *h* for controlling the flow of the pulp from the elevated tank of the pulp mill. In case the pulp to be treated is in a semi-fluid condition or of such a consistency that it cannot readily flow through the pipe, the chamber C is to be provided with a suitable door or gate through which to introduce said pulp. The press chamber may be of any desired shape

Fig. 1

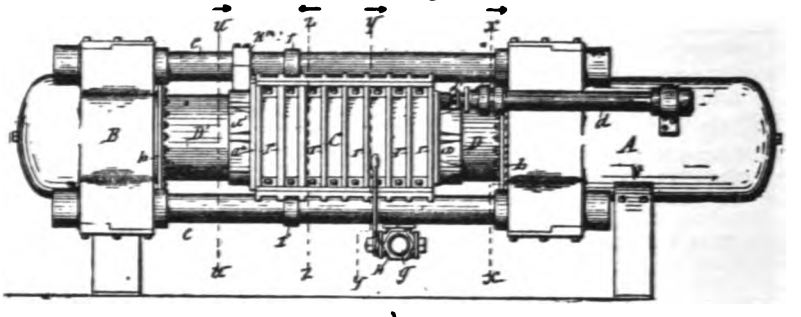
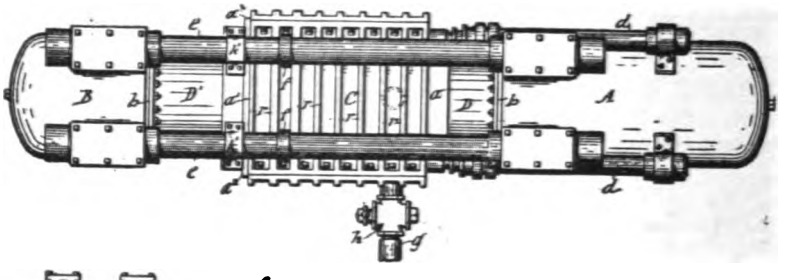


Fig. 2



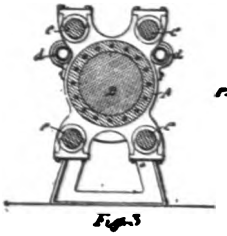


Fig. 3

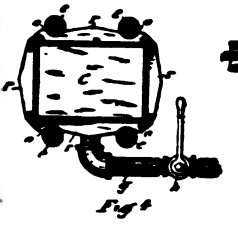


Fig. 4

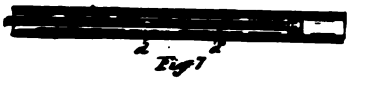


Fig. 7

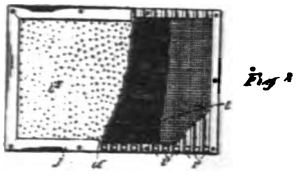


Fig. 8

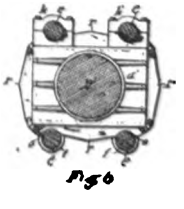


Fig. 6

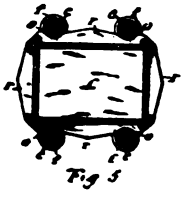


Fig. 5

Fig. 9

Digitized by Google

and size in cross section uniform throughout its length. It is preferable to form the chamber of cast metal braced by stout ribs *r r*, formed on the exterior of said chamber. The ribs *r r* are formed with saddles *o o*, by which the chamber C is supported on the rods *e e*. The saddles partly embrace the rods, so as to prevent lateral movement of the chamber.

The two cylinders A B are provided, respectively, with plungers or pistons D D', which project from the cylinders toward the adjacent ends of the press chamber C. Suitable packings *b* are provided to form water tight joints around the pistons in the usual manner. To the piston D is attached a follower *a*, which is shaped to fit closely to the interior of the press chamber, in which it moves longitudinally during the operation of the machine. At the opposite end of the press chamber is an abutting head *a'*, entering the press chamber a short distance and provided with flanges a^2 engaging the end face of the press chamber C, so as to close said end of the chamber during the process of expressing the liquid from the pulp contained in the press chamber. This abutting head is attached to the piston D', by means of which it is carried to and from the end of the press chamber. The said follower and abutting head are each provided with vertical grooves *i' i'* in the side facing the chamber C, which grooves communicate with suitable outlets for the liquid expressed from the pulp in said chamber. Over the said grooved face is placed a suitable strainer *i*, preferably formed of one or more sheets of coarse wire cloth or netting placed adjacent to said grooved face, a finer wire cloth placed upon the coarser, and a still finer wire cloth or finely perforated brass plate i^3 forms the surface which comes in contact with the semi-liquid pulp. The strainers are seated in recesses in the faces of the follower *a* and abutting head *a'* and confined therein by means of frames *j*, placed on the margins of the exteriors of the strainers and suitably attached to the follower and press head. The abutting head *a'* is provided with boxes *k' k'*, riding on the rods *e e*, which are parallel with the side walls of the chamber C and serve to more positively guide the head *a'* in line with the movement of the follower.

d d represent supplemental cylinders attached to the main cylinder A and disposed axially parallel therewith. These supplemental cylinders are also constructed for hydraulic or hydrostatic pressure and have their pistons *d' d'* connected to the follower *a* for the purpose of retracting said follower after the completion of the process of expressing the liquid from the pulp in the press chamber C. The ends of the cylinders *d d* farthest from the press chamber are open to permit free retrogade movement of the pistons *d' d'*.

The operation of the press is as follows: Water under pressure having been admitted into the cylinder B' causes the piston D' to force the abutting head *a'* against the end of the press chamber to close said end. The cylinder A at the opposite end of the press chamber having been released from pressure and the cylinders *d' d'* charged with water pressure, causes the follower *a* to be retracted in the press chamber, thus leaving the chamber C in condition for receiving the semi-fluid pulp to be treated therein. The fluid or semi-fluid pulp is then introduced into the press chamber, and when this is properly charged the pulp inlet is closed. The water pressure is then admitted into the main cylinder A, the supplemental cylinders *d d* having been relieved from such pressure, while the water pressure is maintained in the cylinder B to keep the press chamber closed. The pressure applied to the piston D of the cylinder A forces the follower *a* inward in the press chamber and compresses the pulp, so as to expel the liquid therefrom and convert it into a comparatively dry sheet or cake. After this is accomplished the cylinder B is relieved from water pressure, thus allowing the abutting head to yield to the pressure of the pulp, and to be forced from the end of the press chamber by a secondary inward pressure applied to the follower, which pushes both the compressed pulp and abutting head *a'* simultaneously from the press chamber. The imperforate walls of the press chamber are essential in this invention, inasmuch as they allow the compressed pulp to freely slide out of the end of the press chamber without tearing or roughening the edges of said pulp. After this has been accomplished the piston D, with the follower *a*, is retracted, leaving the sheet or cake of pulp free to be removed from the machine and the abutting head to be simultaneouly reseated on the press chamber by water pressure, as before. The piston D, having at the same time been completely retracted in the cylinder A by the pistons of the supplemental cylinders *d d*, leaves the machine in condition to operate on another supply of fluid or semi-fluid pulp. The inventor does not limit himself to employing hydraulic or hydrostatic power for operating the press, inasmuch as the follower *a* and the abutting head *a'* may be operated by either a screw, levers, cams, or other suitable mechanical power. The salient feature of the operation of the follower *a* and abutting head *a'* in the open ended press chamber is the convenient and expeditious discharge of the pressed pulp therefrom.

WILLIAM MAKIN & SONS,
Attercliffe Steel Works, Sheffield, England.
(ESTABLISHED A.D. 1736).
PAPERMAKERS' STEEL and BRONZE TOOLS.
Illustrated Catalogues and Price Lists, in French and English, on Demand.

Digitized by Google

BRITISH IMPORTS of CHEMICAL and MECHANICAL WOOD PULP

For the Week Ended June 11th, 1904.

SPECIALLY COMPILED FOR THE BRITISH WOOD PULP ASSOCIATION.

An Official Account of the Registered Quantities and Values of Chemical and Mechanical Wood Pulp imported at the various ports of the United Kingdom.

CHEMICAL—DRY.

Date.	Ports.	Vessel.	Port whence.	Packages.	Quantity.	Value.	Importer.
1904.					Tons.	£	
June 6	London ...	Batavier V. ...	Rotterdam ...	17 bales	1	9	Netherlands S. B. Co.
,, 6	,, ...	King ...	Gothenburg ...	500 ,,	100	800	A. E. Reed & Co.
,, 6	,, ...	,, ...	,, ...	600 ,,	75	600	Berner & Nielsen
,, 7	,, ...	Pollux ...	Uddevalla ...	800 ,,	100	800	,, ,,
,, 7	,, ...	Thorsten ...	Gothenberg ...	410 ,,	73	605	Page, Son & East
,, 7	,, ...	Bonheur ...	Christiania ...	320 ,,	40	310	Andrews & Co.
,, 7	,, ...	Siltona ...	Sarpsborg ...	325 ,,	41	420	Thames Steam Tug & Lg. Co.
,, 10	,, ...	Thule ...	Gothenburg ...	136 cases	20	170	G. Shaw, Lovell & Sons
,, 10	,, ...	,, ...	,, ...	320 bales	40	300	Alsing & Co.
,, 10	,, ...	,, ...	,, ...	270 ,,	50	460	Tough & Henderson
,, 10	,, ...	Avena ...	Uddevalla ...	800 ,,	100	800	Berner & Nielson
,, 11	,, ...	Cameo ...	Christiania ...	160 ,,	20	152	Andrews & Co.
,, 11	Cardiff ...	Ivanhoe ...	Trondhjem ...	3,776 ,,	472	3,776	T. Owen & Co.
,, 11	Grimsby ...	Retford ...	Antwerp ...	50 ,,	10	120	J. Satcliffe & Son
,, 7	Hull ...	Nero ...	Halmstadt ...	780 ,,	96	760	T. Wilson, Sons & Co.
,, 8	,, ...	Gitano ...	Konigsberg ...	96 ,,	17	136	,, ,,
,, 9	,, ...	Silvio ...	Norrkoping ...	30 ,,	5	40	,, ,,
,, 9	,, ...	Calypso ...	Gothenburg ...	480 ,,	60	420	Henderson, Craig & Co.
,, 10	,, ...	,, ...	,, ...	987 ,,	132	1,040	T. Wilson, Sons & Co.
,, 10	,, ...	Nord I. ...	Kotka ...	92 ,,	11	77	W. A. Massey & Co.
,, 10	,, ...	Montebello ...	Viania ...	296 ,,	40	290	T. Wilson, Sons & Co.
,, 11	,, ...	Bruno ...	Hamburg ...	40 ,,	5	35	,, ,,
,, 7	Manchester ...	Hogland ...	Gothenburg ...	300 ,,	40	290	Johnsen, Jorgensen & Wettre
May 24	Rochester ...	Mercur ...	Drammen ...	960 ,,	120	900	A. E. Reed & Co.
June 6	South Shields	Sterling ...	Christiania ...	160 ,,	20	96	P. H. Matthiessen & Co.
,, 6	Glasgow ...	Sheena ...	Gothenburg ...	120 ,,	15	117	Glen & Co.
,, 7	Grangemouth	Sifka ...	Stockholm ...	60 ,,	10	75	W. Grant & Co.
,, 7	,, ...	,, ...	,, ...	30 ,,	5	38	,, ,,
,, 7	,, ...	,, ...	Utansjo ...	2,800 ,,	350	2,290	,, ,,
,, 7	,, ...	,, ...	,, ...	400 ,,	50	380	,, ,,
,, 7	,, ...	,, ...	,, ...	80 ,,	10	75	J. T. Salvesen & Co.
,, 7	,, ...	,, ...	Skutskar ...	240 ,,	30	225	Stora Kopparberg oz Aktiebolag Agency
,, 7	,, ...	,, ...	,, ...	2,000 ,,	250	2,118	Becker & Co.
,, 7	,, ...	,, ...	Gefle ...	400 ,,	50	438	,, ,,
,, 7	,, ...	,, ...	Stugsund ...	840 ,,	105	750	W. G.
,, 7	,, ...	,, ...	Frano ...	400 ,,	50	375	Henderson, Craig & Co.
,, 6	Granton ...	A. Edward ...	Gothenburg ...	580 ,,	96	768	Chr. Salvesen & Co.
,, 6	Leith ...	Elba ...	Konigsberg ...	240 ,,	43	343	J. Currie & Co.
,, 8	,, ...	Mascotte ...	Rotterdam ...	188 ,,	40	329	J. Gibson & Co.
,, 9	,, ...	Coblenz ...	Hamburg ...	44 ,,	10	79	J. Currie & Co.
		Deduct to correct :					
March 11	London ...	Mimonia ...	Sarpsborg ...	100 ,,	13	96	Page, Son & East

CHEMICAL—WET.

1904.						Tons.	£	
June 11	Cardiff ...	Ivanhoe ...	Trondhjem ...	2,090 bales		418	1,672	T. Owen & Co.
,, 6	Hull ...	Ariosto ...	Gothenburg ...	2,000 ,,		200	800	Henderson, Craig & Co.
,, 6	,, ...	Angelo ...	Christiania ...	750 ,,		150	600	T. Wilson, Sons & Co.
,, 10	,, ...	Montebello ...	,, ...	400 ,,		140	700	,, ,,

MECHANICAL—DRY.

Deduct to correct :

1904.					Tons.	£	
May 25	Rochester .. See Acc. I.	Mercur	Drammen ...	960 bales	120	900	A. E. Reed & Co.

MECHANICAL—WET.

1904.						Tons.	£	
June 6	London ...	Bonheur ...	Drammen ...	1,104 bales		194	404	Johnsen, Jorgenson & Wettre
,, 7	,, ...	Thorsten ...	Gothenburg ...	800 ,,		18	180	W. E. Bott & Co.
,, 11	Cardiff ...	Ivanhoe ...	Trondhjem ...	592 ,,		118	236	W. Owen & Co.
,, 9	Hull ...	Calypso ...	Gothenburg ...	167 ,,		20	45	Becker & Co.
,, 6	Manchester ...	Sarp ...	Drammen ...	1,500 ,,		300	620	Johnsen, Jorgensen & Wettre
,, 6	,, ...	Oxford ...	Christiania ...	3,000 ,,		400	830	Andrews & Co.
,, 6	,, ...	Man. Commerce	Quebec ...	7,263 ,,		918	2,016	Becker & Co.
,, 8	Queenboro' ...	Nancy Lee ...	Chicoutimi ...	21,257 ,,		3,543	7,770	,, ,,
,, 7	South Shields	Sterling ...	Arendal ...	400 ,,		80	180	P. H. Matthiessen & Co.
,, 8	Glasgow ...	Barbro ...	Drammen ...	5,250 ,,		1,015	2,362	Clyde Paper Co.

Digitized by Google

DIRECTORY.

Names and Addresses under these Headings will be charged for at the rate of 50/- per annum (52 insertions) for each card of two lines or under. Each additional line £1 per annum extra. Fresh headings are inserted when necessary.

ABYSSINIAN TUBE WELLS.

LE GRAND & SUTCLIFF, 125, Bunhill Row, London, E.C. . . . . Artesian Well Engineers.

ANALYSTS.

HURST, GEORGE H., F.C.S., 22, Blackfriars Street, Manchester. Speciality—Wood Pulp Sampling.

ARTESIAN WELLS.

ABUNDANT WATER SUPPLIES Co., apply to C. Isler and Co., Bear Lane, Southwark, S.E.

ISLER, C. & Co., Bear Lane, Southwark, London, S.E.

CHINA CLAY.

BEST (JAMES) & SONS, Stoke-on-Trent. Specially Prepared China Clay for Papermakers. Stocks at Runcorn and Preston. Mines—Cornwall.

BODELVA & LANTERN CHINA CLAY Works. Stocks at Runcorn. Address J. Fletcher Pagan 8a, Rumford Place, Liverpool. 7853

CHINA CLAY Co., 4, St. Ann's Square, Manchester. Mines: St. Austell, Cornwall. Stocks: Manchester, Preston, Runcorn, Leith. 8855

ROGERS, J. & Co., Truro, Cornwall.—Agents, W. G. Taylor and Co., Ltd., 83, Queen Victoria Street, London, E.C., and 29, St. Andrew's Square, Edinburgh.

W. SINGLETON BIRCH & SONS, Ltd., 15, Upton Street, Manchester. Mines: Rosevear, St. Austell, Cornwall.

COLOURS.

CARDWELL, J. L. & Co., Cromwell Buildings, 11, Blackfriars Street, Manchester. Specialities: Mineral Black, Ven. Red, Ochres, and Umbers.

HINSHELWOOD, Thos., & Co., Glasgow. Manufacturers of High-Grade Colours of all classes. Samples submitted or matched on application.

LEVINSTEIN LIMITED, Crumpsall Vale Works, Manchester. Warehouse, 21, Minshull Street. Manufacturers of Specialities for Paper dyeing in all shades. Blackley Blues, Scarlets, &c. Whitcol P.A. for sizing.

The VIA GELLIA COLOUR Co., Matlock-Bath. Colours in every variety. Mineral Black. Washed Golden Ochres and Umbers. Enquiries solicited.

MINERAL WHITE.

BELVOIR, Newark-upon-Trent. The first makers in Newark, 1850.

CAFFERATA & Co., Newark-upon-Trent. Established over 40 years. Largest makers of Mineral White in the Kingdom.

HOWE, John & Co., Carlisle.

RAGS.

CHALMERS, E. & Co., Ltd., Bonnington, Leith.

SIZING, etc.

The GROVE CHEMICAL CO., Ltd., Appley Bridge, near Wigan, Lancashire. Glues, Gelatine, Size, Albumenoid, Dextrines, Farina, Starch, Painters' Glue, etc.

STEEL & BRONZE TOOLS.

MAKIN, Wm. & SONS, Sheffield, Estab-lished 1736. Roll Bars, Plates, Cutter Knives, Doctor Blades, etc.

STRAWBOARD CENTRES.

BOYD, HART & CO., Makers of Round, Square, and Square Centre Shells, 21, Exchange Square, Glasgow. Telegraphic address: "Strawboard." 9341

TALC.

LASSALLE, TH., Montlucon, France.

GYPSUM & TERRA ALBA.

WINSER & Co. (GOTHAM Co., LTD.), 312, Deansgate, Manchester, and Kegworth Mills, near Derby. Established over 40 Years

VENTILATING AND INDUCED DRAUGHT FAN MAKERS.

SAVE ON YOUR COAL BILL by using our Induced Draft Fan. At Oldham with three Boilers we are doing work that previously required four, and saving £28 a month in fuel. Write for particulars—SUTCLIFFE VENTILATING AND DRYING CO. Ltd., Cathedral Corner, Fennel Street, Manchester, Telephone No. 3920. Telegraphic Address: "VENTILABRO.

WOOD PULP.

ALSING & Co., Ltd., 110, Cannon Street, London, E.C. Agents for the well-known "K.K." Soda Pulp; also Sulphite and Mechanical.

GRANT, W. & Co., 4a, St. Andrew Square, Edinburgh. Agents for best shippers, Sulphite and Sulphate, Mechanical, Pine, Brown, Aspen.

WERTHEIM, A. & Co., Hamburg.

THE MANCHESTER ANILINE Co.,

20, High Street, Manchester.

SPECIALITIES:

MAGENTA, VIOLET, GREEN, METANIL YELLOW.

Mill-Hand Edition.

A Special Edition of *The World's Paper Trade Review* is published for supply only to bona-fide employees in Paper Mills.

The Annual Subscription is 6s. 6d., or 3s. 3d. for six months, PAYABLE IN ADVANCE.

New subscriptions are not accepted for any less period than six months, and must terminate at the end of a quarter, i.e., the last week in March, June, September, or December, and not at odd periods. Foreign subscribers must add, when remitting, the extra postage, i.e., 1s. 1d. for six months, or 2s. 2d. for the year.

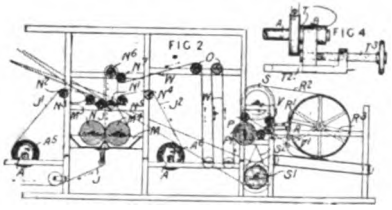
The receipt of a copy in a COLOURED WRAPPER denotes the termination of a subscription.

Offices: 58, Shoe Lane, London, E.C.

Digitized by Google

Making Pasteboards.

Fig. 2 shows a sectional elevation of part of a machine for the continuous manufacture of pasteboard from strips of paper, patented by Mr. H. B. S. Toone. The pasteboard is stated to be applicable for making jacquard cards. The figure



shows the apparatus pasting two more strips J^1, J^2 to the strip J, which has been already formed by pasting four sheets of paper together in the same manner as the strips J^1, J^2 are pasted on. The strips J^1, J^2, supplied from rolls A^5, A^6, pass over guide rollers N^2, N^3, N^4, N^5 to the feed rollers N, N^1. The rollers N, N^1 press these strips upon the compound strip J, to which paste is supplied by rollers M^3, M^4 rotating in a paste trough M. The strip of pastework W now travels over the rollers N^6, N^7, O, P^1, V^1 and beneath press rollers P, V to the fixed knife R, and is cut by the knife R^1 on the revolving frame R^3. The paste and feed rolls are driven by belt gearing, as shown. In order to vary the measured lengths of pasteboard cut off, the revolving frame R^3 can be driven faster or slower relatively to the rest of the machine. This is done by a belt S^2 running over the cone pulleys S, S^1, the position of the belt fork being adjusted by a slide moving over a scale. The frame R^3 is driven by a belt R^2 from the pulley S. The shafts A, Figs. 2 and 4, of the paper rolls A^5, A^6, etc., are adjustable axially. Each shaft A has collars T on each side of the bearing B, which is adjusted on the bed T^2 by a screw T^3. The provisional specification states that one or two additional pasted bands of paper may be introduced between the middle pasted band and the outer dry bands at each operation.

Registering Deckle-Edged Paper.

One of the perplexing problems which has confronted many printers, says a writer in the *Practical Printer*, is how to do close register work on deckle-edge paper, especially when it is necessary to feed the "ragged" edge directly to the feed-gauge. I have had some experience in this line of work and will attempt to describe in this article an effective way in which work of this character may be printed with the most perfect register, even when outline type and illustrations in several colours are used. It may not be amiss to remark that it was only after many hours of deep study that the method was discovered.

Make the job ready in the usual way. Place the two bottom gauges in the same position as on an ordinary job; but don't put on any side guide, as is usual. Instead of usual cardboard "fenders," at the bottom, make the left hand fender of one-point brass rule, about the regular size. The right hand one may be of cardboard. Now take the stock, in about 500 lots, and place each pile under a weight of some sort, then take a sharp knife and cut a slit about a quarter of an inch deep through the entire quantity, just where the brass "fender" *will catch the slit* when feeding. Remove the stock from under the weight and take about fifty sheets and bend the right hand side of the slit up slightly so that it will catch the brass "fender" more easily.

The brass fender takes the place of the side guide and the slit in the paper giving a straight edge in the feeding, the register is perfect. Of course, the slit should remain bent open on each colour and form, until the job is completed, hence there are two straight edges to feed to through the entire operation of printing all the forms.

If these directions are followed carefully, there may be no hesitation about running the press at full speed, and it will not be found difficult to feed after printing a few. The stock should be a trifle larger in size than the completed job, so that it can be trimmed down to the proper size on the slit edge.

New "Limiteds."

HEPBURN and CO. (DARTFORD), Ltd.

Registered with a capital of £20,000, in £1 shares (20,000 five per cent. original preference), to adopt an agreement with J. G. Hepburn, P. Hepburn, Beatrice Cole, and G. Hepburn, and to carry on the business of tanners, curriers, leather dressers, manufacturers of leather and leather articles for all purposes, dealers in leather, hides, bark, and tanning materials, glue and gelatine manufacturers and merchants, wharfingers, lightermen, warehousemen, contractors, dealers in india-rubber, gutta-percha, hemp, canvas, and cotton goods, manufacturers of and dealers in leather substitutes of any description, etc. The signatories are:—J. G. Hepburn, P. Hepburn, E. Hepburn, T. Hepburn, Miss G. Hepburn, J. S. Hepburn, and P. H. Hepburn. No initial public issue. The number of directors is to be not less than three nor more than seven. The first are J. G. Hepburn, P. Hepburn, E. Hepburn, and T. Hepburn, each of whom may retain

Digitized by Google

office while holding 200 ordinary shares. Qualification of ordinary directors, £100. Remuneration of permanent directors, such sum, not exceeding £1,400 per annum, divisible, as they may resolve; in default of any resolution, J. G. Hepburn to receive £500, P. Hepburn £100, E. Hepburn, £400, and T. Hepburn £400. In the event of a deficiency in payment of preference dividends amounting to 7½ per cent. of the amount credited as paid up on original preference shares, the holders of such shares may require the directors to convene meetings for the passing of a special resolution to wind up. Should such resolution not be passed, and the arrears not be reduced to 5 per cent. within three months from the annual general meeting, the holders of 5,000 original preference shares may apply to the court for a winding-up order, and the default shall be conclusive evidence between the parties.

HEMINGTON PAPER CO., Ltd.

Registered with a capital of £10,000, in £1 shares, to acquire the business of James Hemington, carried on at 6 and 7, Moor-street Birmingham, and to carry on the business of paper merchants, wholesale stationers, paper bag makers, printers, bookbinders, manufacturers of and dealers in paper, stationery, smallwares, fancy goods, and stationers' sundries of all kinds, etc. No initial public issue.

R. H. JOHNS, Ltd.

Registered with a capital of £15,000, in £5 shares (1,000 preference), to acquire the business carried on by R. S. Johns, at 46, Commercial-street, 159, Dock-street, and 5, Baneswell-road, all in Newport, Mon., as R. H. Johns, and to caray on the business of printers, lithographers, stationers, account book manufacturers, bookbinders, booksellers, newsagents, publishers, newspaper proprietors, typefounders, stereotypers, electrotypers, ink manufacturers, advertising agents, billposters, machine rulers, etc. Minimum cash subscription, 20 per cent. of the shares offered to the public. The first directors (to number not less than three nor more than seven) are E. Hartley, A. Newland, E. G. Nicholls, F. L. Johns, F. W. Johns, and R. S. Johns (permanent managing director).

S. NEWTON and CO., Ltd.

Registered with a capital of £5,000, in £1 shares (2,500 preference), to adopt an agreement with S. Newton for the acquisition of the business carried on by him at 32, Withy-grove and White Hart-court, Manchester, as S. Newton and Co., and to carry on the window-ticket, show-card, and sign writers, printers, lithographers, embossers, papermakers and stationers, engravers, designers, shop decorators and fitters, stationers, booksellers, publishers, etc. No initial public issue. The first directors (to number not less than three nor more than seven) are W. N. Martin (chairman), S. Newton (managing director), and others to be appointed by the signatories.

BANDSMEN'S PRESS, Ltd.

Registered with a capital of £5,000, in £1 shares (1,500 preference), to acquire so much of the business of J. Henry Iles and Co., of 188, Strand, as relates to the managing, printing, and publishing of the *British Bandsman and Contesting Field*, and the *Orchestral Times and Military Band Record*, to adopt an agreement with J. H. Iles, and to carry on the business of music and general publishers, printers of music, newspapers, magazines, books, bills, posters, and circulars, advertising contractors, contest, festival, fair, exhibition and concert promoters and managers, etc. No initial public issue. The first directors are S. Cope and J. H. Iles.

JOHN WARILLOW, Limited.

Registered with a capital of £14,000, in £1 shares (2,000 employees), to acquire the business carried on as John Warillow, at 23, Great Hampton-street, 74, Vyse-street, and 37, Warstone-lane, Birmingham, as A. F. Warillow, at 101-102, Great Hampton-street, Birmingham, and formerly as Bullows and Wood, at Grant-street, Birmingham, and to carry on the business of paper merchants, stationers, manufacturers of the time-saving jewellers' stock pads, bookbinders, account book makers, machine rulers, printers, lithographers, relief stampers, engravers, ticket manufacturers, card bevellers and blockers, jewel case manufacturers, advertising agents, etc., and to adopt an agreement with Elizabeth Warillow. No initial public issue. Elizabeth Warillow is the governing director, and may retain office while holding 3,000 shares.

MOBILE PUBLISHING CO., Ltd.

Registered with a capital of £20,000, in £1 shares (100 founders), to carry on the business of publishers, magazine, and newspaper proprietors, advertisers, and printers, and to manufacture and deal in motor carriages, cycles, and horseless vehicles of all kinds, etc. No initial public issue.

TARIFF CHANGES AND CUSTOMS REGULATIONS.

SIERRA LEONE.

The Orders-in-Council, dated 12th October, 1903, and 25th January, 1904, made under section 3 of the Sierra Leone Customs Duties Amendment Ordinance, No. 10 of 1903, provide for the free importation into the Colony of the following articles from 1st January, 1904:—Printing machines and all appliances (except printing paper) used in the process of printing, and printing ink. All printed literary matter, including scientific and technical works in all languages, and printed music.

Digitized by Google

THE PAPERMAKERS' OPPORTUNITY!

Much has been said and written concerning the stationary condition of the Exports of British Paper. There are houses ready to do a larger export trade, and to secure increased orders no opportunity should be lost by Papermakers and Wholesale Stationers in bringing their names and specialties before

COLONIAL & FOREIGN BUYERS.

To do this effectively, no better medium presents itself than the "British and Colonial Printer and Stationer," Established in 1878. Its contents are keenly studied by Foreign and Colonial purchasers of Paper, Stationery, &c., and firms advertising in its pages may rely upon securing

GOOD BUSINESS.

From Sydney, N.S.W., Wm. Brooks, Printer and Stationer, writes:—"I read your paper with a great deal of interest, and there is no doubt that it is a paper which should be taken by every printer who wishes to keep himself in touch with developments in our line.

H. S. Cropper and Co., Nottingham, says.—"As a medium for advertising it is second to none."

THE LEADING JOURNAL.

Published EVERY THURSDAY.

Paper-makers, Wholesale Stationers, &c.

DESIROUS OF INCREASING THEIR HOME TRADE,
AND EXTENDING THEIR BUSINESS WITH . .

AUSTRALIA, NEW ZEALAND, INDIA, AFRICA, CANADA, &c.

SHOULD BOOK SPACE WITHOUT DELAY.

NEXT EXPORT ISSUE—including "BUYERS' GUIDE"—IN JUNE.

ADVERTISEMENT RATES on Application to

W. JOHN STONHILL & Co., 58, SHOE LANE, LONDON, E.C.

SUBSCRIPTION:

United Kingdom, 10s.; Colonial and Foreign, 12s. per Annum Post Free.

Digitized by Google

Commercial Intelligence.

Re JOHN CORNER,
Bookseller and Stationer.

This debtor carried on business at 5, Union-street, Bath, under the style of Williams and Co., and resides at 3, Prospect-place, Beechen-cliff, Bath, formerly at 62, London-road, Worcester. The receiving order was made in the Bath County Court on May 12th, and the first meeting of creditors was held at the London Bankruptcy Court, on Monday, before Mr. W. P. Bowyer, assistant receiver. A statement of affairs has been lodged, showing unsecured debts £4,234 0s. 8d.; a partly secured debt £382 10s. 0d. (security valued at £300), and preferential creditors £53 6s. 6d. The assets, valued at £1,876 7s. 10d., consist of cash-in-hand, £27 17s. 3d.: stock-in-trade, £1,168 7s. 0d. (cost £1,460 17s. 0d.); fixtures and fittings, £200; good book debts, £430 3s. 7d.: and doubtful debts, £71 2s. 8d., and bad debts, £81 6s. 0d., together estimated to produce £50. The present deficiency of £2,493 9s. 4d., together with a net profit of £250 made on the trading since 10th May, 1903, is accounted for by the following items, *viz.*: household and personal expenses since 10th May, 1903, £200; goodwill, paid to Mr. Bath, upon which the debtor now places no value, £1,600; depreciation of stock, £292; depreciation of fixtures, £110; law costs, £50; bad debts, £103 12s. 11d.; interest on balance of stock paid to Mr. Bath, £200; interest on borrowed money, £150; and alteration to premises, £40. The observations of the official receiver upon the case are as follows, *viz.*:—The petition in this matter was filed by a creditor, the original owner of the business at 5, Union-street, the act of bankruptcy alleged being the execution of a deed of assignment by the bankrupt, dated the 5th ult. in favour of Mr. G. J. B. Curtis, accountant, of Bath. The debtor consented to the receiving order being made, and also himself applied to be adjudicated bankrupt. A private meeting was held at Bath on the 11th May, at which an approximate statement of affairs was submitted, showing liabilities £3,837, and assets £2,447; no proposal was made to the creditors, who resolved that if the debtor was adjudicated bankrupt they would recommend the names of two gentlemen to act as trustees in the bankruptcy. The bankrupt, who is 48 years of age, states that he took over the business of a bookseller and stationer, carried on at 5, Union-street, Bath, on the 1st September, 1897. His capital at commencement was £100, which was supplemented by a further sum of £160 six months afterwards. According to a balance-sheet and profit and loss account prepared for the two years ending 30th June, 1897, a substantial profit was made, and the bankrupt arranged to pay for the goodwill the sum of £1,600, in yearly instalments of £160. The vendor of the business is entered in the statement of affairs as an unsecured creditor for the sum of £1,423, balance due in respect of the goodwill, etc. The bankrupt alleges, with reference to the insolvency, that he had too small a capital to start with, and that the agreement entered into for the purchase of the concern was too onerous in its terms; also that he agreed to pay more than he now thinks the business worth. The bankrupt also states that he has worked up a good business, and if it were not for the onerous terms under which he took over the concern, he considers he should now be in a good position. He admits that he has contracted debts with various creditors in the ordinary way of trade since February of last year, when he first became aware of his insolvent circumstances. The record of his business transactions is most incomplete. He discontinued writing up his bought ledger and cash book in 1901, and the only accounts kept since that year relate to the book debts. Stock was taken on 30th June, 1900, the amount at cost including fixtures, being £1,994. No account was however prepared at this date showing the liabilities. According to his deficiency account he was only barely solvent in June, 1900. He estimates the net profit for the past twelve months at £250, but the bad debts and interest should be spread over the period from June, 1900. The debtor has been ordered to file a cash account for the last six months, and also a further and better deficiency account. The unsecured liabilities are due to 216 creditors, and may be summarised as follows:—

Goods bought	£2,157	3	5
Loans in 1897 and 1898	558	17	6
Law costs...	37	1	8
Banker's overdraft	57	14	1
Balance due for goodwill, etc.	1,423	0	0
	£4,234	0	8

This amount should be increased by £100, an error now discovered in the statement of affairs.

The partly secured creditor is the bankrupt's brother, his claim being made up of the following loans:—

September, 1897	£100	0	0
September, 1898	200	0	0
February, 1904	60	0	0
Interest	22	10	0
	£382	10	0

The security held by him consists of an assignment, executed on February 16th of this year, of the bankrupt's interest under the will of his father, who died in November, 1903, the value of the security being estimated at £300. With the object of preserving the goodwill and benefit of the lease, the official receiver has arranged (pending the appointment of

Digitized by Google

FOREIGN RAGS.

FRENCH.

Quotations f.o.b. Rouen

Extra Linens	—	Blue Linen No. 1 ...	8/0
White Linens, No. 1 ...	22/0	Fustians	4/0
,, No. 2 ...	17/0	Old Bagging (solid) ...	2/9
,, No. 3 ...	14/0	,, (common)	1/0
,, No. 4 ...	8/0	Hemp, tarred in coils	11/0
,, No. 5 ...	4/6	Hemp strings	10/0
Gray Linens (strong)	13/0	NEW CUTTINGS.	
,, (extra) ...	16/0	White Linen, ...	33/0
White Cotton, No. 1 ...	13/0	Unbleached Linen ...	30/0
,, No. 2 ...	9/0	Gray Linen	23/0
,, No. 3 ...	7/6	Extra White Cotton...	19/6
,, No. 4 ...	6/0	Ordinary ,, ...	18/0
,, No. 5 ...	3/0	Curtain Cuttings ...	17/0
White Knitted ...	17/0	Stay ,, ...	15/0
Muslins	6/0	Extra Light Prints ...	13/0
Extra Light Prints ...	8/0	Unbleached Cotton ...	21/0
Light Prints	4/0	Oxford	12/0
Dark Prints	1/6	Flanellettes	15/0
Blue Cotton, No. 1 ...	5/6	Blue Cotton	10/0

GERMAN.

Quotations are as follows

NWC	19/0	Dark Cottons	2/10
SPFFF	20/0	Grey Linens I. ...	11/10
SPFFF and SPFF ...	18/0	,, II....	7/0
SPFF	15/0	CSPFFF	13/10
SPF	12/0	CSPFF	9/10
Light Prints	7/0	CSPF	7/5
Fustians	3/10	Dark Blues (selected)	7/0
Mixed Coloured Cottons	3/10	Jute, No. I.	3/0
		,, No. II.	1/0

PRUSSIAN.

C.i.f. London, Hull, or Leith.

SPFF	13/6	CC (cotton)	3/0
SPF	9/0	Jute I	2/3
FG	8/0	,, II	1/6
LFB	6/3	Rope I	7/3
FF	3/0	,, II	4/3

BELGIAN.

Quotations, f.o.b. Ghent.

White Linens, No. 1	21/0	House Cloths... ...	2/6
,, ,, No. 2	16/0	Old Bagging (solid) ...	3/0
,, ,, No. 3	12/0	,, ,, (common)	2/6
Fines (Mixed)	12/0	NEW.	
Grey Linens (strong)	9/6	White & Cream Linens	5/0
,, (extra)	14/0	White Cuttings ...	22/0
Blue Linens	8/0	Unbleached Cuttings	21/0
White Cottons No. 1 ...	18/0	Print Cuttings ...	8/0
,, No. 2 ...	15/0	FLAX AND HEMP WASTE.	
Outshots No. 3... ...	10/0	Flax Waste, washed and dri'	10/0
Seconds No. 4	7/9	Fair	8/0
Prints (Light)	7/0	Flax Card Waste ...	6/0
Fustians (Light) ...	3/6	Hemp Waste, No. 1...	8/0
Fustians (Dark) ...	2/0	,, ,, No. 2...	3/0
Black Cottons ...	3/0		
Hemp Strings (unt'r'd)	2/3		

DUTCH.

F.o.r. English ports.

Whites, No. 1	14/9	W. Manilla Rope (coils)	7/3
,, No. 2... ...	9/9	do. Tarred ,, ...	4/9
,, No. 3... ...	6/6	Canvas No. 1	14/0
Grey Linens	8/6	,, No. 2	10/0
Clean House Cloth ...	3/0	,, No. 3	6/0
Mixed Fustians ...	4/9	W. Untarred Rope ...	10/0
Coloured Prints ...	2/7½	Paper Shavings ...	
Dark Prints	2/1½	Free from wood ...	7/0
Blue Cottons	5/6	Mixed Bagging ...	2/7½
Light Lilac Cottons	7/0	Bright New Gunny...	3/6
Muslins	9/9	New Bleached Cuttings...	17/6
Mixed Hemp Rope Coils...	8/3	Unbleached Cuttings	16/6
Broken (in bags) ...	6/0		

NORWEGIAN.

C.i.f. London, Hull, Tyne, and Grangemouth.

1st Rope (tarred)	8/3-9/0	2nd Canvas	7/6
2nd ,, ,, ...	5/0-5/9	Jute Bagging	
Manilla Rope (white)	10/6-11/0	Gunny	3/0-3/3
Best Canvas ...	11/9-12/0	Mixed	2/0-2/6

TURKISH.

F.o.b. Constantinople (per 100 kilos)

Whites, 1st ...	Francs 10	Ropes, Thick ...	Francs 10
,, 2nd ...	,, 5	,, Medium	,, 12
Coloured ...	,,	,, Thin	,, 15

STRAW.

Oat, ex steamer Thames	£1	15	0
Wheat ,, ,, ...	2	0	0

HOME RAGS.

LONDON.

N. White Cuttings	21,6-26,0	Canvas No. 1 ...	14/0-15/0
Fines (selected) ...	19/6-21/0	,, No. 2 ...	9/6-10/6
,, (good London) ...	17/0-17/6	,, ,, 3 ...	5/0
Outshots (selected)	10/0-13/0	Mixed Rope ...	3/9-3/3
,, (ordinary)	8/0-9/0	White Rope ...	4/0-4/6
London Seconds	1/6-1/9	White Manilla Rope	8/0-9/0
Country ,,	3/0-7/0	Coil Rope	8/0
London Thirds ...	0/9-1/3	Bagging	1/3-1/9
Country ,, ...	2/0	Gunny	2/6-2/6

BRISTOL.

Fines	17/6	Clean Canvas ...	13/6
Outshots	9/0	Second ,, ...	9/6
Seconds	5/0	Light Prints ...	6/6
Thirds	2/6	Hemp Coil Rope	9/0
Mixed Bagging ...	2/6	Tarred Manilla ...	7/0

MANCHESTER.

Fines	14/0-15/0	Blues	3/6-4/0
Outshots (best) ...	8/6-9/6	Bagging	2/3-2/6
,, (ordinary)	7/6-8/0	,, (common)	1/6-2/0
Seconds	4/0-4/6	W. Manilla Rope	9/0-10/0
Thirds	2/0-2/3	Surat Tares ...	2/9-3/0

EDINBURGH.

Superfines	15/0	W. Manilla Rope	9/6-10/0
Outshots	12/0	Tarred Manilla Rope	6/0
Mixed Fines ...	14/0	,, Hemp Rope	8/0
Common Seconds	8/0	Rope Ends (new)	5/0
First ,,	11/0	,, (old)	3/0
Prints	6/0	Bagging	2/6-2/3
Canvas (best) ...	14/0	,, (clean) ...	3/0-4/0
,, 2nd ...	9/0		
Black Cottons ...	2/3		

GLASGOW.

Fines	12/6-16/0	Canvas No. 1 ...	15/0
Blues	4/6	,, No. 2 ...	10/0
Common Blues ...	3/3	Manilla Rope ...	8/0
Bagging	4/0	Tarred Hemp ...	9/0

DUBLIN.

White Cuttings ...	16/0	Mill Bagging ...	2/6
Fines	9/0	White Manilla ...	8/0
Seconds	4/6	Tarred Hemp ...	6/0
Light Prints ...	1/6	Rigging	10.0
Black ,, ...	1/0		

JUTE.

Good White	£17	0	0	—	19	0	0
Good	14	10	0	—	16	10	0
Medium	12	0	0	—	13	0	0
Common	11	0	0	—	12	0	0
Rejections	9	10	0	—	10	0	0
Cuttings	5	0	0	—	8	0	0

WASTE PAPERS.

Cream Shavings ...	9/0	Small Letters... ...	3/9
Fine ,, ...	8/0	Large ,, ...	5/0
Mixed ,, ...	4/3	Brown Paper	2/3
White Printings ...	7/9	Light Browns ...	3/9
White Waste	3/0	Dark ,, ...	2/6
Wood Pulp Cuttings	3/3	Books & Pamphlets	3/9
Blue Paper	2/0	Strawboard Cuttings	1/3
Crushed News ...	3/0	Jacquards	2/0

For Export 25s. per ton extra.

STARCH.

F.o.r. London, less 2½%

Maize— Crisp	£10	15	0
Pearl	10	10	0
Powder	11	0	0
Special	11	10	0
Farina— Prime...	10	10	0
B.K.M.F.	14	0	0
Delivered:			
Rice— Special (in chests) ... ... net	19	10	0
Crystal (in bags) ... ... less 2½%	18	10	0
Granulated (in bags) ... ,,	17	10	0
Waste... ... ... ,,	13	0	0
Dextrine—	14	0	0

ROSIN.

Quotations (ex wharf less 2½% discount) are as under:—

B/C	D	E	F	G	I	K	M	N	W G	W W
7/6	7/7½	7/9	8 0	8,1½	8,6	9/0	11/6	11/0	11/6	12,0

ROSIN SIZE.

Arledter make, 70 per cent. resin, per ton ...	£7	0	0

Digitized by Google

SIZING.

Prices are nominally as under:—

English Gelatine	Per cwt.	£3 0 0	£4 10 0	
Foreign ,, ...	,,	3 0 0	4 10 0	
Fine Scotch Glues	,,	2 6 0	2 10 0	
Best Long Scotch Glues ...	,,	1 10 0	2 0 0	
Common Black	,,	1 13 0	2 0 0	
"Town" Glues	,,	1 0 0	1 5 0	
"Bone" Glues	,,	1 5 0	1 10 0	
Foreign Glues	,,	1 0 0	1 5 0	
Bone Size	,,	5 0	8 0	
Gelatine Size	,,	6 6	10 0	
Dry B.A. Pieces	,,	2 5 0	2 10 0	
,, English Pieces	,,	1 10 0	2 0 0	
Wet ,, ,, ...	,,	8 6	9	
,, Sheep Pieces	,,	3 0	4 0	
Buffalo Hide Shavings ...	,,	1 10 0	2 8 0	
,, Picker Waste ...	,,	1 12 0	1 16 0	

COLOURS.

Nominal Prices.

Mineral Black	Per Ton	£3 10 0
Black Peerless	,,	56 0 0
Ochre (English and Irish)	,,	*3 15 0
Ochre (French)	,,	*4 0 0
Pure Crawshay Turkey Red ...	,,	22 0 0
Red Oxide and Venetian Red	,,	*4 0 0
Umber (Derbyshire)	,,	*4 0 0
,, (Irish)	,,	2 0 0
Chrome (Pure)	Per Cwt.	2 10 0
Yellow (Imperial)	,,	0 14 0
,, (Bordeaux)	,,	0 12 6

*Higher Prices according to strength and shade.

PASTE COLOURS, with 40% of Colour (less 2½ d/d.)

Orange Pulp...	Per Cwt.	2 10 0
Golden Yellow Pulp	,,	1 16 0
Lemon Yellow Pulp	,,	1 16 0
Prussian Yellow	,,	1 16 0
Green (free from Arsenic)	,,	1 16 0
Paste Blue, 33%	,,	1 16 6
,, 40%	,,	2 2 3
,, 50%	,,	2 10 0

LIME.

Per ton, f.o.r. works ... . 1£/-

LOADINGS, etc.

China Clay, in bulk, f.o.b. Cornwall, 8s. 6d. to £2 5s. 6d. (highest grade) per ton, bags 5s., and casks 9s. per ton extra; delivered Lancashire, £2 (for best papers), and commoner qualities 22/ to 36/ per ton.; best f.o.r. London, in casks, £2 7s. 6d. per ton; f.o.b Liverpool, in 5 cwt. casks, £2 to £2 5s. 9d. for export.

French Chalk, W.E., W.O., and other brands, £2 17s. 6d. to £4 8s. 9d. per ton, according to quality, delivered in most Yorkshire and Lancashire towns, also f.o.b. Glasgow, Belfast and London.

Italian Chalk, finest brands—f.o.b. Manchester, Liverpool, or London—I.W.A., "Portland Mills," and "Swan" marks, £4 to £5 per ton of 10 bags.

Agalite, in bags, c.i.f. U.K. ports, £3 to £3 10s. per ton.

Paper Makers' Plaster, 14/ per ton and upwards delivered.

Superfine Hardening, delivered Mills, 50/ per ton and upwards.

Patent Hardening (2 ton lots), f.o.r. Lancs., £2 19s. 6d.

Mineral White (also known as Terra Alba, and Sulphate of Lime), per ton f.o.r. or boat at makers works:—

Superfine, best picked white, finely ground ... ... } 18/ — 28/
Superfine, second quality ... ... }
Pottery, best quality ... ... }
Pottery, No. 2 quality ... ... }

Gypsum

Light Pink ... ... }
Seconds ... ... } 6/6 — 16/
Brown ... ... }
Thirds, selected ... ... }

Terra Alba and Gypsum delivered any Lancashire or Yorkshire station about 10/ per ton extra, except Manchester, which is only 8/ per ton extra. Delivered London stations about 7/ per ton extra.

Bauxite, minimum alumina, 60%, 17s. f.o.b.

Sulphate of Alumina, £3 15s. 0d. to £4 12s. 6d. per ton delivered to Mills.

Sulphate of Barytes, No. 1, £3 4s. od.; No. 2, £2 12s. 6d No. 3, £2 2s. od.; No. 4, £1 15s. od. per ton, less 2½%.

Magnesite (containing 98% Carbonate of Magnesia), raw ground, £4 10s. od.; calcined, £8 10s. od.

Magnesite (in lump), £1 19s. 6d. per ton.

Satinite, £3 4s. 6d., in casks, f.o.b. Liverpool or Manchester.

Chloride of Zinc, £6 18s. 6d. per ton.

Books for Papermakers.

"ART OF PAPERMAKING," by ALEXANDER WATT. A practical handbook on the manufacture of paper, etc. 7s. 6d.

"CELLULOSE," by CROSS and BEVAN. An outline of the chemistry of the structural elements of plants. 12s.

"CELLULOSE, RESEARCHES ON," by CROSS and BEVAN. 6s.

"DYEING OF PAPER PULP," by JULIUS ERFURT. Translated into English by JULIUS HUBNER. A practical treatise for the use of papermakers and others. German edition, 12s. 6d. English edition, 15s.; Posted abroad, 20s.

"DIRECTORY OF PAPERMILLS, 1904." A list of the papermills in the United Kingdom, also of London wholesale stationers and the paper stainers of Great Britain. 2s. 6d.

"DIRECTORY OF FRENCH AND FOREIGN PAPER & BOARD MANUFACTURERS," 1903. This directory (in French) contains a list of papermakers, paper merchants, booksellers, etc., and articles on technical subjects. 9s. 3d.

"FACTORY BOOKKEEPING FOR PAPERMILLS," by JOSEPH MACNAUGHTON. A system devised to meet practical requirements. 10s.

"NORDISK PAPPERS KALENDER, 1902." Scandinavian pulp and paper trade Directory. 4s.

"PRACTICAL PAPERMAKING," by GEORGE CLAPPERTON. A manual for papermakers and owners and managers of papermills. 5s.

"PAPERMAKERS' POCKET-BOOK," by JAMES BEVERIDGE. Concise information relating to engineering, chemical, and office and papermaking departments of the mill. 10s.

"PAPERMAKING," by CROSS and BEVAN. A text book of principles, presenting the subject to the reader according to its scientific perspective. Second edition, 12s. 6d.

"PRACTICAL TESTING OF RAW MATERIALS," by S. S. DYSON. 12s. 6d.

"SAMPLING OF WOOD PULP," by R. W. SINDALL. Methods of sampling for moisture tests. 2s.

"STAMPELBOK," by K. VON HOFSTEN. Book of the trademarks of the chemical and mechanical wood pulp mills in Sweden and Norway, in the English language. Edition for 1902. 21s.

"TABLES OF WEIGHT OF PAPERS" for ascertaining the weight of paper in grammes per square metre from different sizes of Paper in reams of 480 and 500 sheets; in English, French, and German. 2s. 6d.

"BULLETIN JOURNAL DES FABRICANTS DE PAPIER," a bi-monthly French paper trade journal. Annual subscription, £1 4s., including postage. A good Continental advertising medium, rates on application to the Sole British Agents as under.

Any of the above may be obtained, post free, on remittance with order to

W. JOHN STONHILL & CO.,
58 SHOE LANE, LONDON, E.C.

Digitized by Google

General Notes.

CITY PAPER BAG CO., LTD., BRISTOL.—Second debenture registered June 6th, for £600; holder: C. Markham, estate agent, 44, High-street, Bristol; charged on the undertaking and all the property, including the uncalled capital and any future capital.

PRINTONIA, LTD., SOUTH NORWOOD, S.E.—Lien registered June 8th, for £100 six per cent. debentures, part of £300 authorised; charged on all the property, including the uncalled capital for the time being.

THE sons of the late Mr. George Singer, a Past Master of the Stationers' Company, have presented a silver inkstand to the company as a memorial of their father. The inscription on it is "Presented to the Worshipful Company of Stationers by William Sewell Singer, Horace Davies Singer, and Thomas Percy Singer, in loving memory of their father, George Singer, Citizen and Stationer; born 11th November, 1815; died 12th November, 1903. Master of the Company, 1891-1892."

RE FREDERICK JAMES BURFORD, FANCY BOX MANUFACTURER.—The bankrupt, who carried on business at 11, Great Cambridge-street, Hackney-road, N.E., and failed in July, 1891, applied to Mr. Registrar Giffard at the London Bankruptcy Court on June 8th for an order of discharge. Mr. C. A. Pope, assistant receiver, reported that the debts were returned at £340 11s. 10d., and the assets had realised £10. For six years before the failure the bankrupt had carried on the above business, he having started in 1885, with a capital of £50 borrowed from his son. Loss on the trading a further loss of £30 or £40 by a traveller's embezzlement were the causes assigned for the failure. The offences reported were insufficiency of assets to pay 10s. in the £ on the unsecured debts, and imperfect bookkeeping, and on those grounds the discharge was suspended for the minimum term of two years. Order entered accordingly.

THE will has been proved of Mr. Edward Hulton, newspaper proprietor, of Manchester, who died on March 25th. The gross amount of the estate is £558,436. The testator appointed his son Edward Hulton, his daughter Mary Ellen Hulton, and his friend John James Arnold, stockbroker, Manchester, his executors, and directed that his son, Edward Hulton, should be governing director of E. Hulton and Co., Ltd., and his interest in E. Hulton and Co., Ltd., in trust for his children in equal shares. He devised £15,000 to his trustees upon trust to pay an income to his wife, and directed that they should set apart and invest £5,000 each on behalf of his sisters Mary Ann Gough and Ellen Kerley, and £1,000 on behalf of his nephew, John Hulton. His residuary estate he devised upon trust in equal shares for his children. In a codicil, dated March 24th last, Mr. Hulton appointed Joseph Sampson, solicitor, Manchester, an additional trustee. He bequeathed his interest in E. Hulton and Co. to his son, Edward Hulton, his daughter Mary Ellen Hulton, and his daughter Margaret Hulton. He revoked the bequest of his residuary estate in favour of his children, and directed that his will should operate as if the children had been excluded from taking a share of the residuary estate and the number of shares into which the same was divisible was reduced accordingly. He bequeathed a considerable number of charitable legacies.

THE Unbreakable Pulley and Mill Gearing Co., Ltd., West Gorton, Manchester, have appointed Mr. F. J. Hill (trading as Death and Elwood), Joseph-street, Leicester, as their agent for the sale of "unbreakable" pulleys and mill gearing in the town and county of Leicester. Mr. Hill will hold a large stock at his Leicester show-rooms and is prepared to execute orders promptly.

"HOLIDAYS ON THE CONTINENT" is the title of an interesting little illustrated booklet to a series of tours in less known districts of Holland, North Germany, the side valleys of the Rhine, the Tyrol, the Belgian Ardennes, and Scandinavia, easily and inexpensively reached by the Great Eastern Railway Company's routes *via* Harwich and the Hook of Holland and Antwerp. It is nicely printed on toned paper, illustrated with pretty little two-colour views, and is published by the Great Eastern Railway.

A CANADIAN paper thus pointedly attacks the man who borrows instead of buys his newspaper: "Say, dear reader, this may be your neighbour's paper you are reading. Perhaps you are accustomed to read your neighbour's paper week after week instead of subscribing for one of your own. Some editors would roast you for that, but if the good judge of reading matter who orders and pays for this paper is willing that you should hog your information out of his bin, we are not going to object. But has it ever occurred to you that this good neighbour of yours would get a much better paper if it was not for such fellows as you who absorb our product without making any returns therefor? Have you stopped to think that if you paid for what you got it would enable the editor to give a larger and more complete service to that generous and deserving neighbour? You are robbing that neighbour every week, and you ought to stop, not for our sake, but as a matter of moral principle."

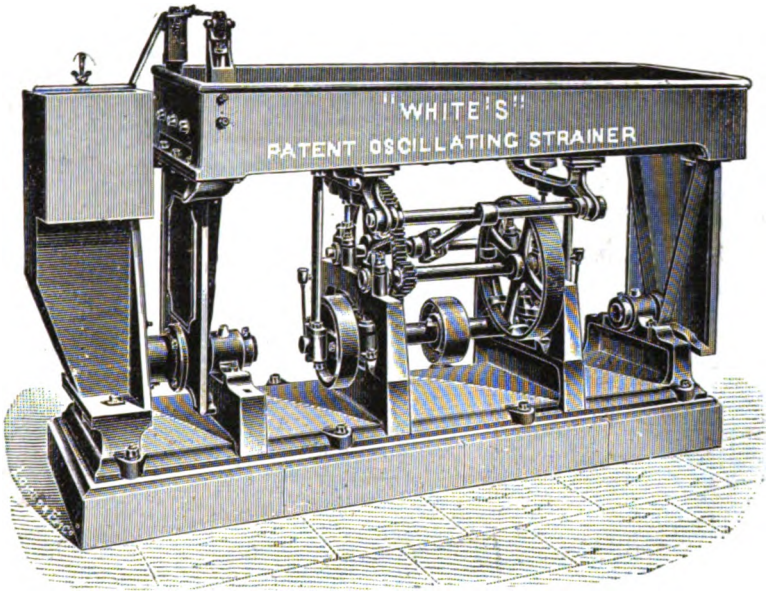
THE BRYANT PAPER CO., United States, give particulars of a six days' run—from Monday morning seven o'clock to Saturday evening six o'clock—on book paper, the quantity produced being 120 tons on a 136-inch Fourdrinier, an average of 1,846 lbs. of paper an hour for 130 hours.

Digitized by Google

JAMES BERTRAM & SON, LTD.

Leith Walk Foundry,

ESTABLISHED 1845. **EDINBURGH.**



Over 500 of **"WHITE'S"** New Patent

FLAT OSCILLATING STRAINERS

Are now at Work with Great Success, and we can confidently recommend them as the BEST and MOST EFFICIENT Strainers now at Work.

"WHITE'S" PATENT DRYING CYLINDER,

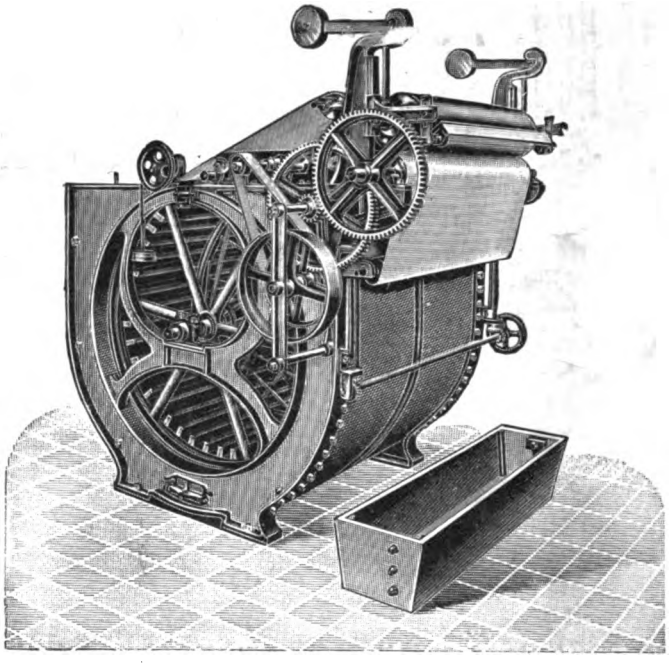
having the ends and manhole cover fixed without any through-going bolts, thus ensuring an absolutely steam-tight joint. Leakage is impossible. Over 300 Cylinders already made on new patent design.

PRICES AND PARTICULARS ON APPLICATION.

Telegraphic Address: "BERTRAM, LEITH."

Digitized by Google

212 SUPPLIED WITHIN TWO YEARS.



PAYS FOR ITSELF WITHIN A VERY SHORT TIME.

FÜLLNER

Patent Rotary Felt Filter & Save All.

According to the nature of the Stuff and width of Filter, **FILTERING CAPACITY is from 30,000 to 150,000 Gallons in Twenty-Four hours, and STUFF RECOVERING CAPACITY from 2 to 6 tons (calculated dry), per week.**

Absolutely discards the late FÜLLNER TANK FILTER.

For Particulars please apply to

O. LECHLA, Agent,

6, Holborn Viaduct, LONDON, E.C.

Digitized by Google

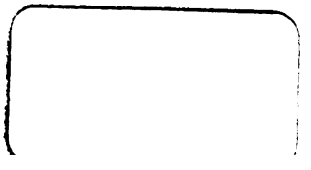
Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

AUG 1 - 1942



Digitized by Google